

160

Application	108
Transactional OS	106
Middleware	104
Network OS	102
Hardware	100

Figure 1A

180

Java	C++	Cobal	Small-talk
CORBA 124			
Network OS 102			
Hardware 100			

Figure 1C

195

C	146
TUXEDO	144
Network OS 102	
Hardware	100

Figure 1E

170

Java	118
Enterprise Java Beans	114
Network OS	102
Hardware	100

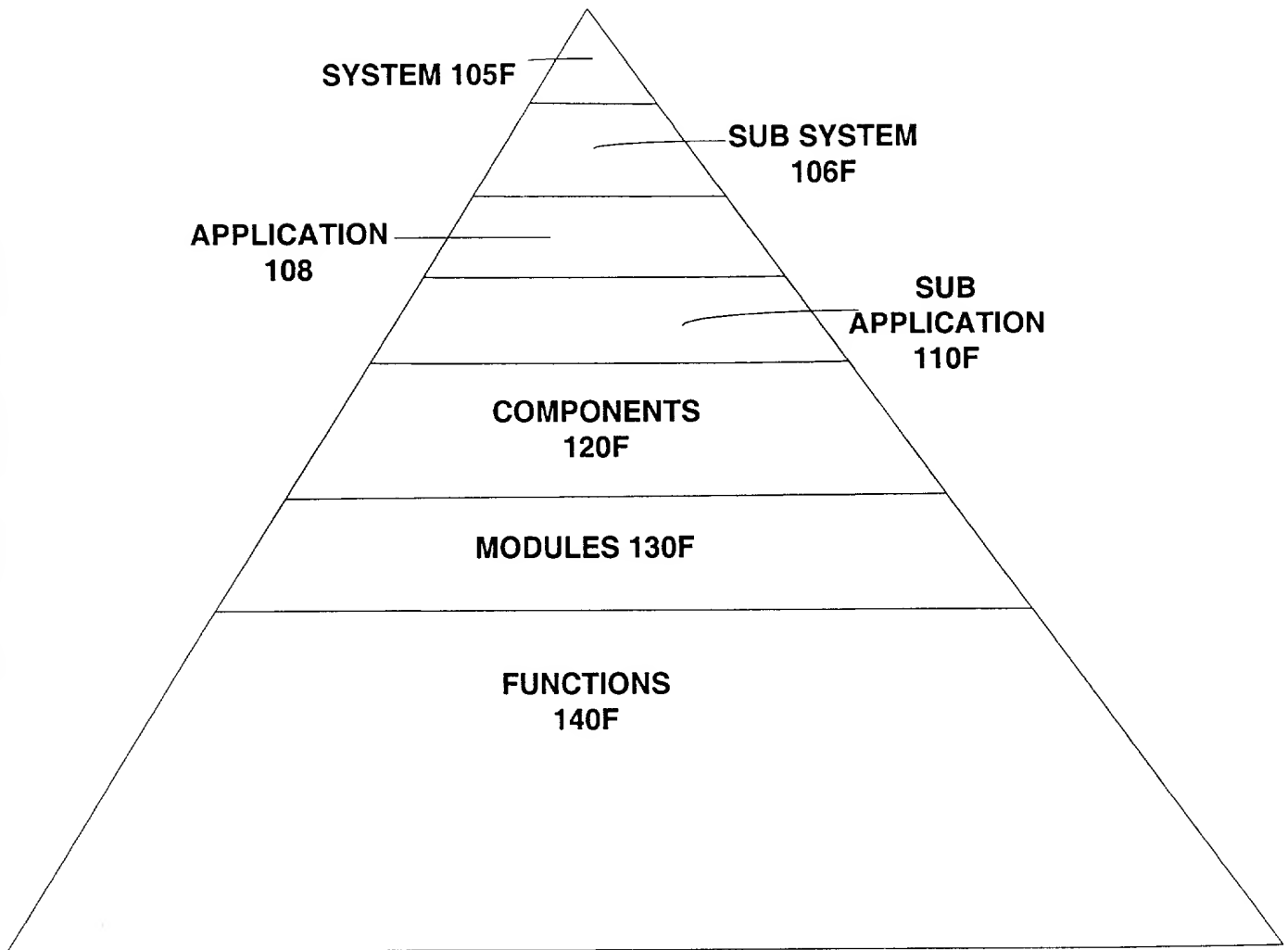
Figure 1B

190

Java	C++	Cobal	Small-talk
Windows DNS (COM/MTS) 134			
Network OS 102			
Hardware 100			

Figure 1D

100F



PRIOR  
ART  
FIGURE 1F

100F

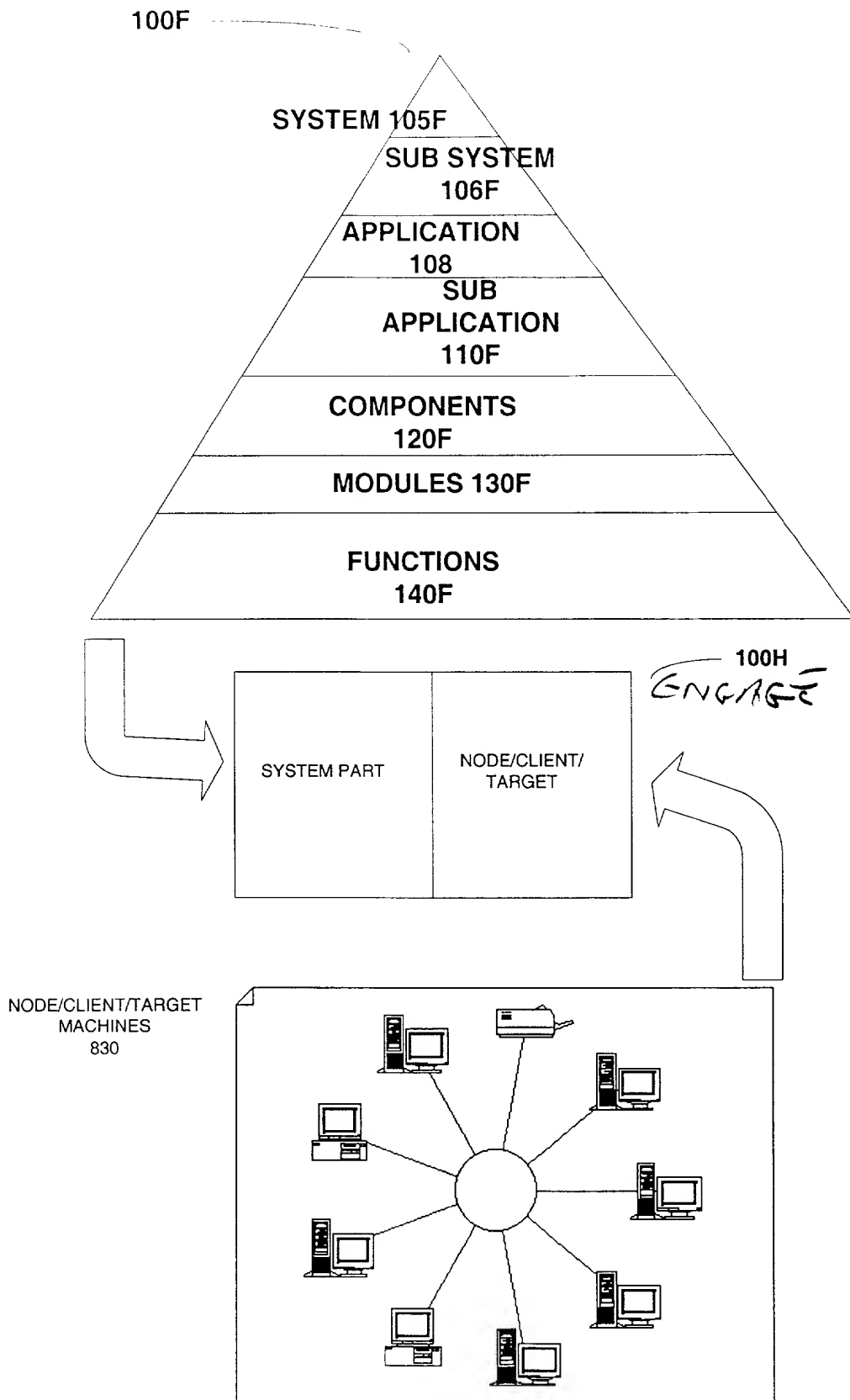


FIGURE  
1G

100H

ENGAGEMENT  
PAIR  
110H

PART ID 120H	TARGET ID 130H



FIGURE 1H

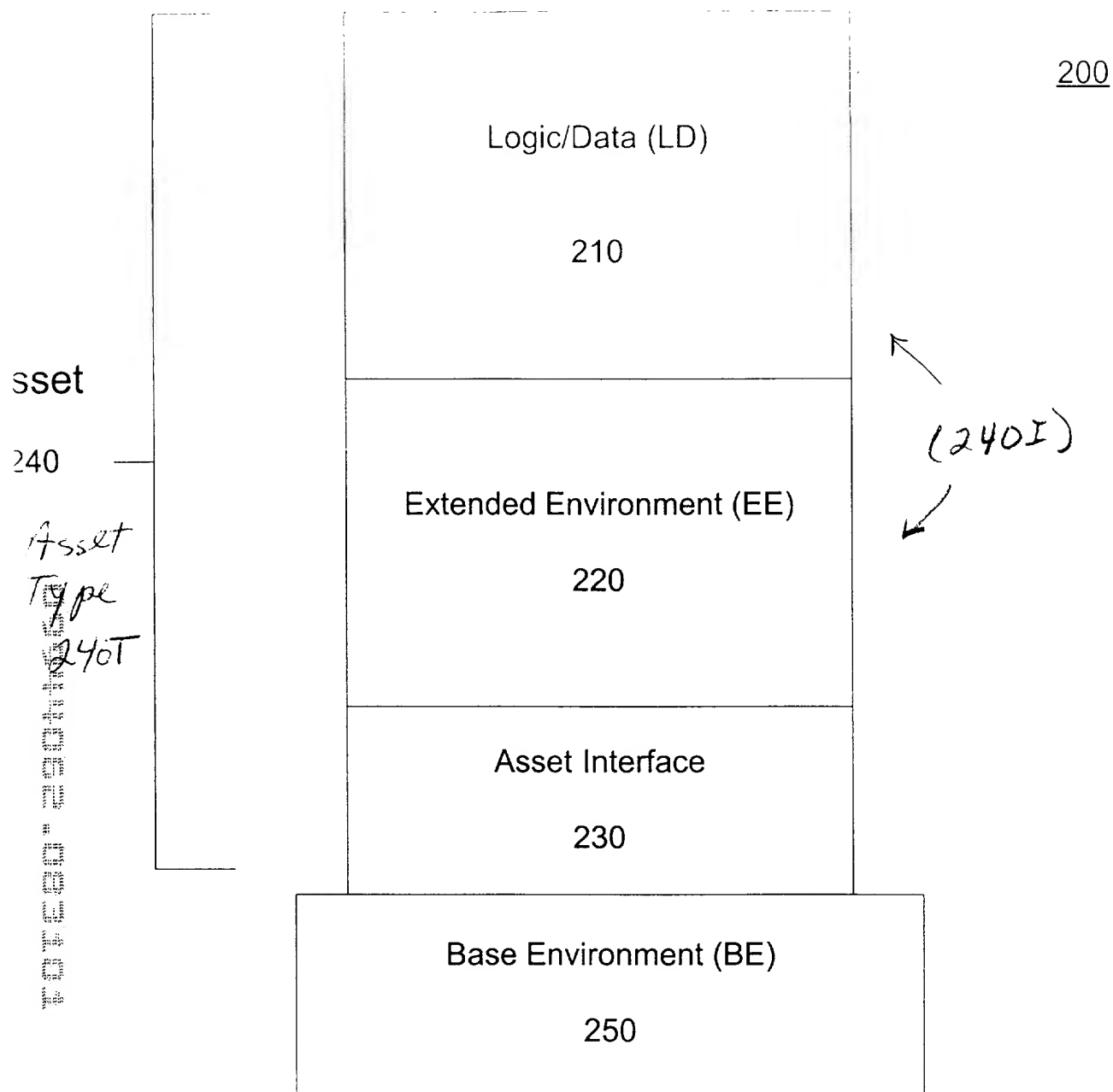
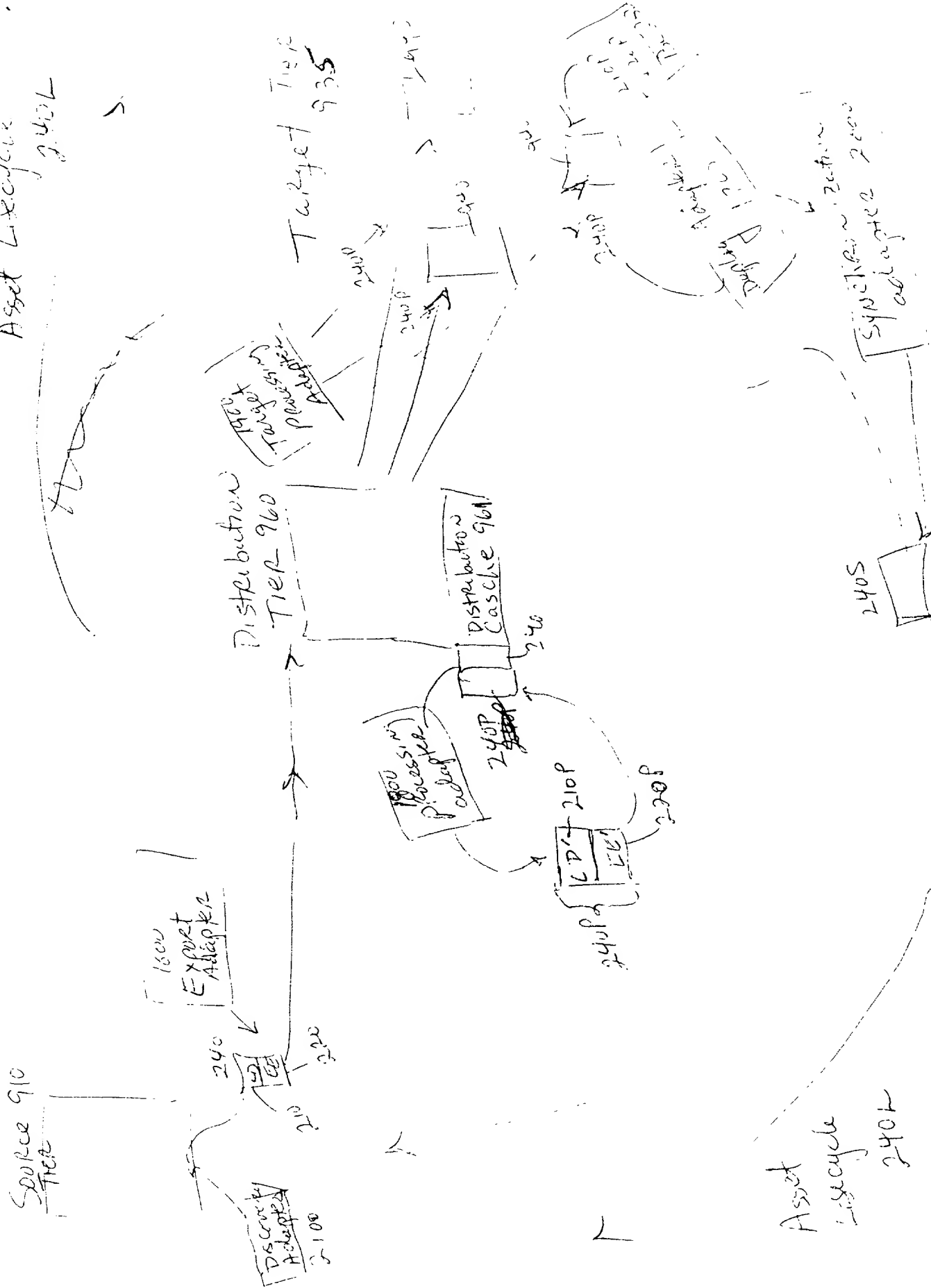


Figure 2

Page 21

Asset Lifecycle



## Extended Environment (EE)

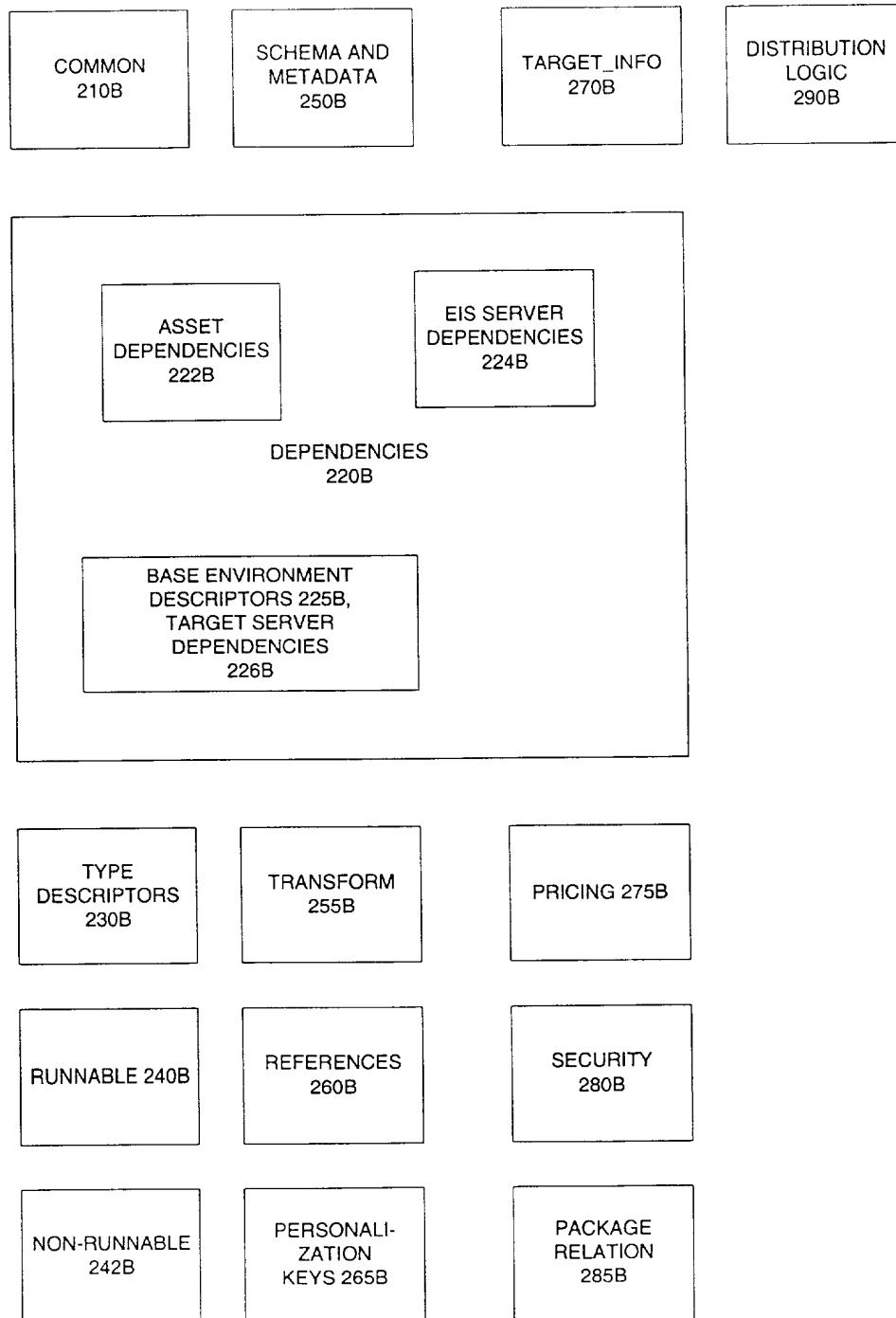


FIGURE 2B

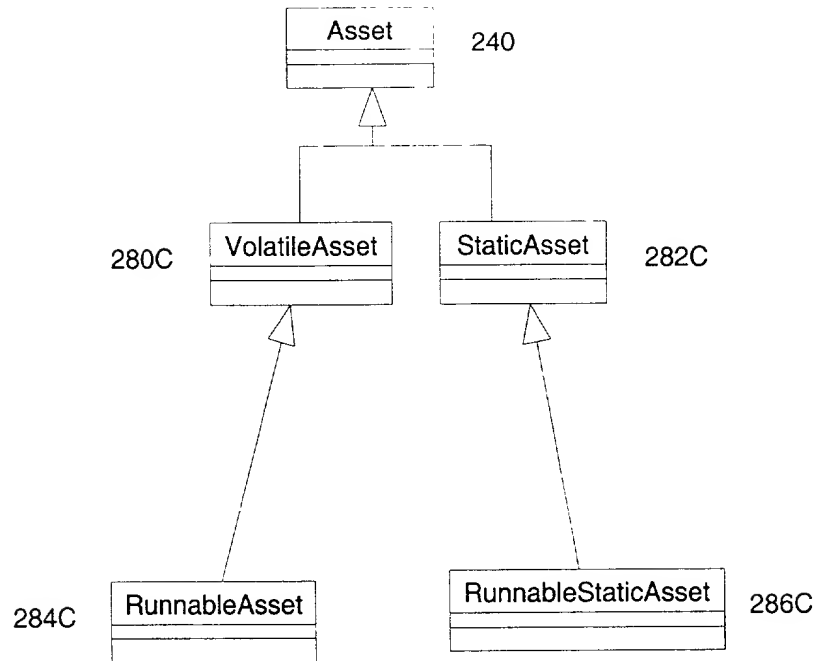


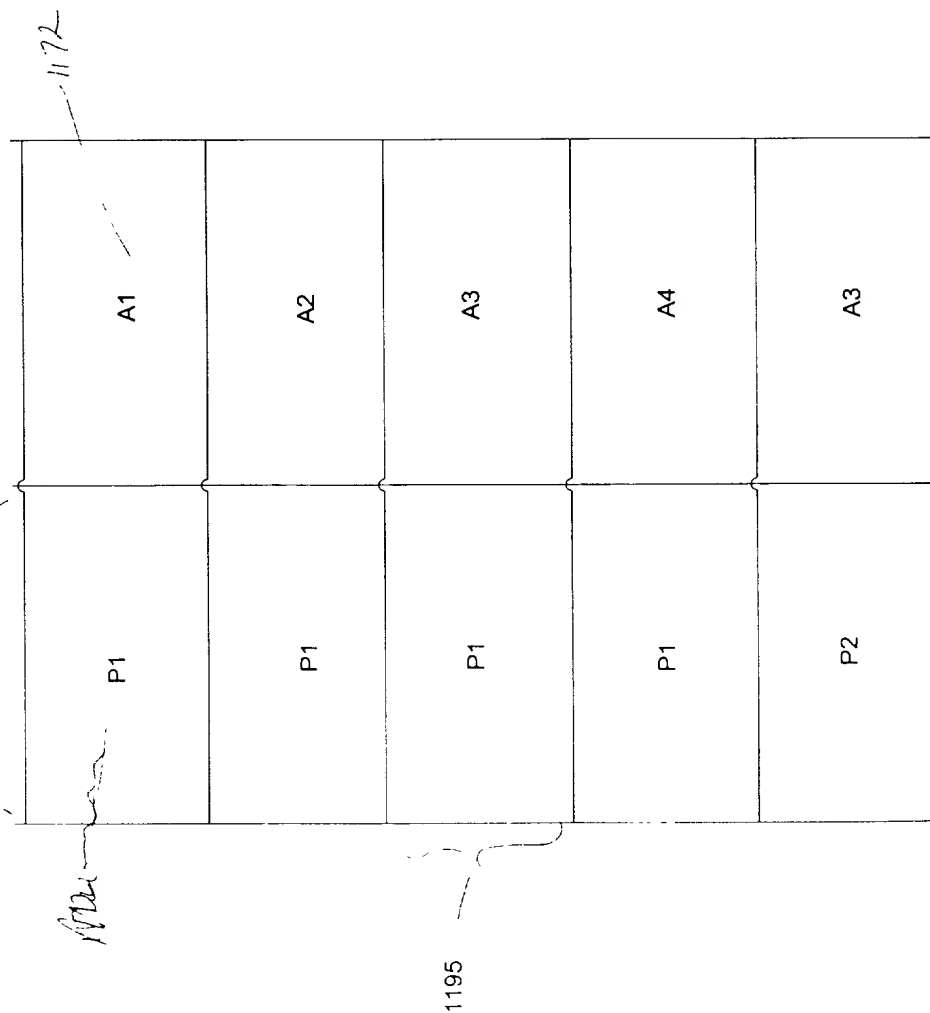
FIGURE 2C



1190

1194,  
240

1192,  
~~1192~~



Package Content Data  
Structure

Figure 3

Figure 4

1170

Asset ID 1172	Location (Machine Location URL) 1174	Name 1176	Asset Type 1178	Version (e.g. Time Stamp) 1179	Other (Optional) 1179A
A1			240T		
A2					
A3					

1175

Asset  
Definition Data  
Structure

Asset Data  
Structure 1370

Asset ID	Version
1372	1374
1375	

Figure 5

Client  
Deployment  
Queue 1380

Target/Client ID
1382
1385

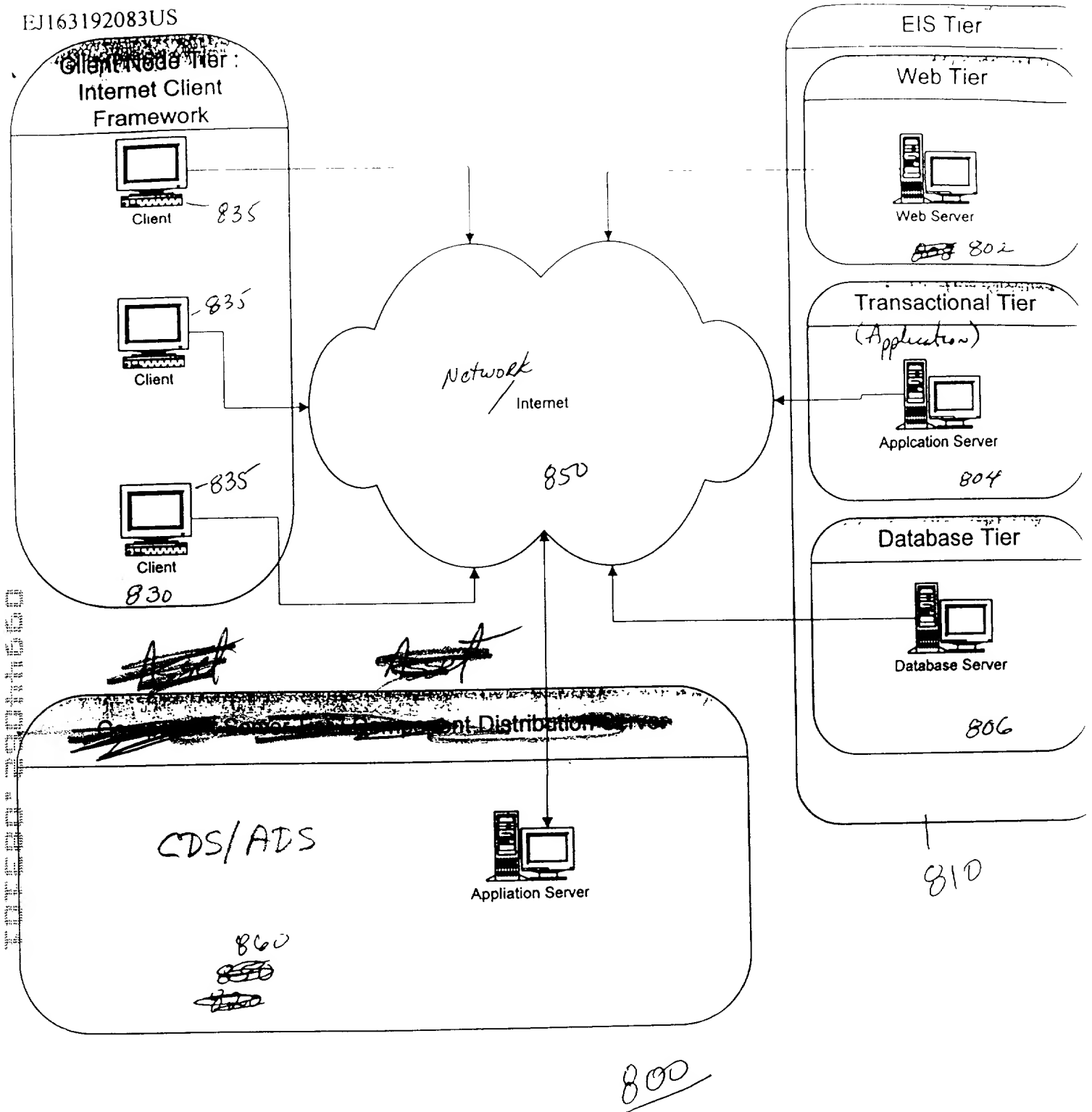
Figure 7

1390

Client ID	Client Assets
1392	1394
1395	

Client Asset  
Table

Figure 6



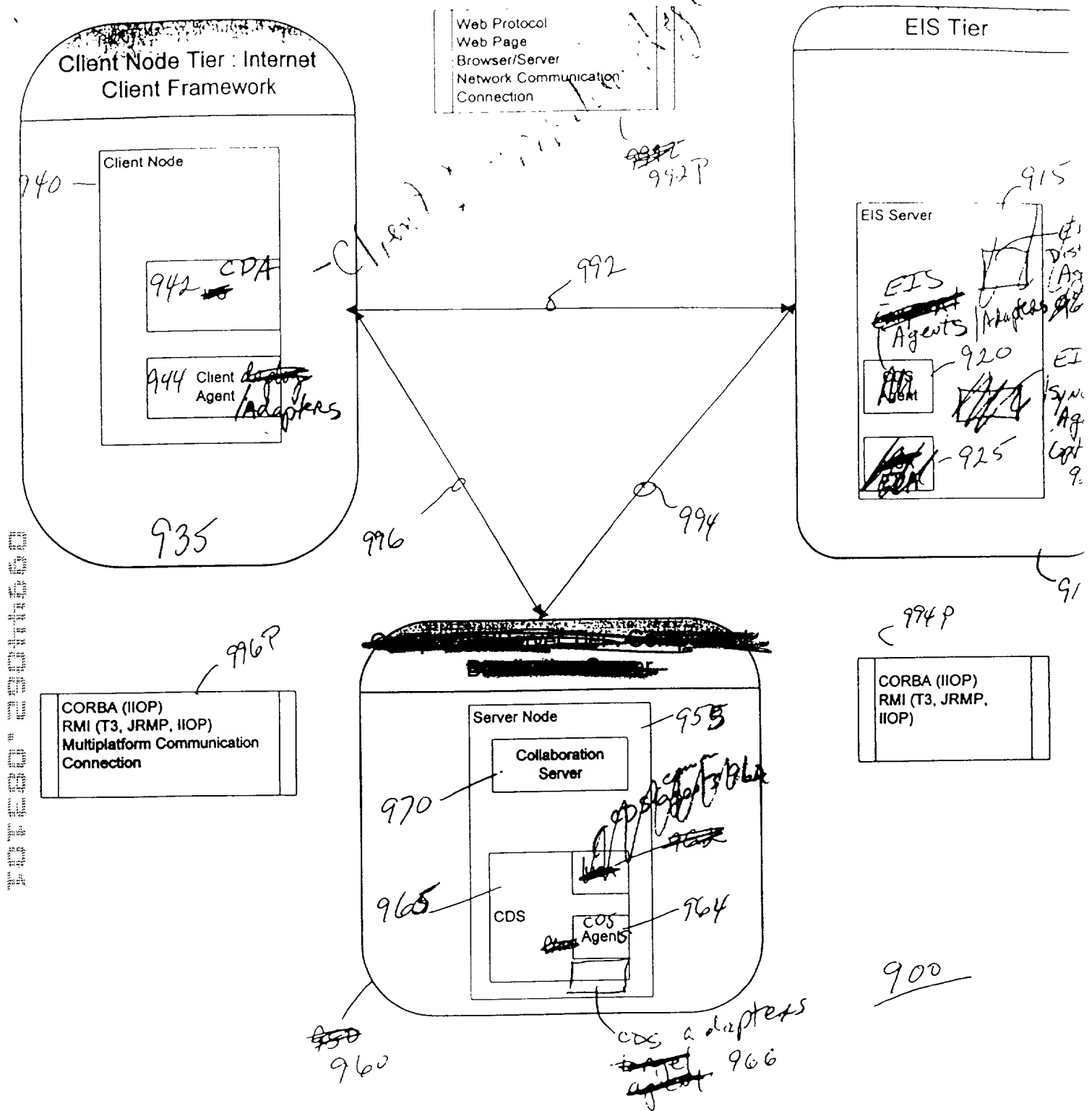


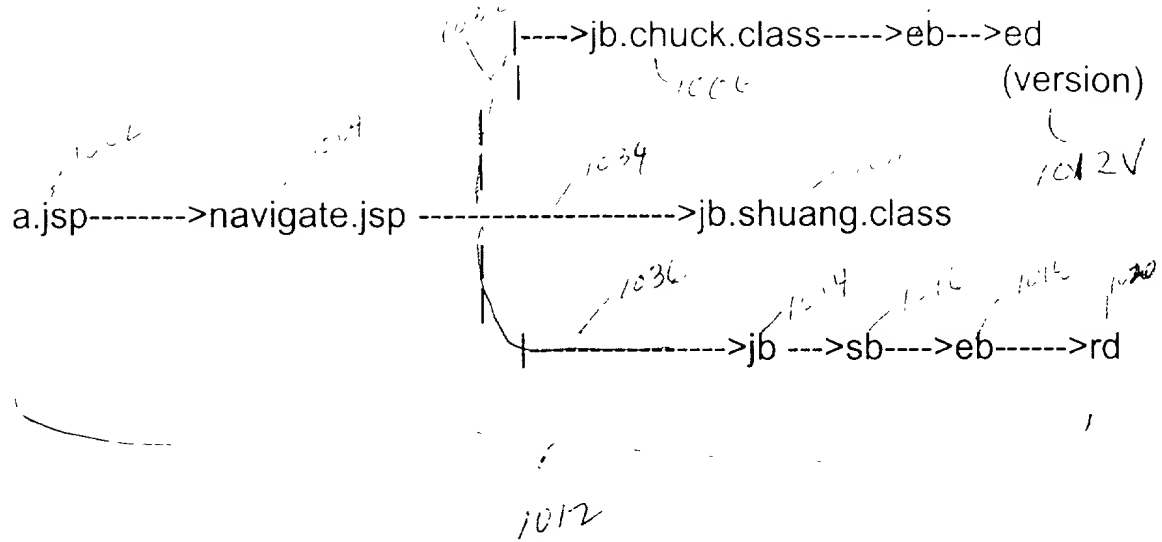
Figure 7  
Logical Architecture

4/29/0

IIC, Ltd  
Highly Confidential

P1

1050E



1050A

Pp

Figure 10

1100 1105 1160

1100

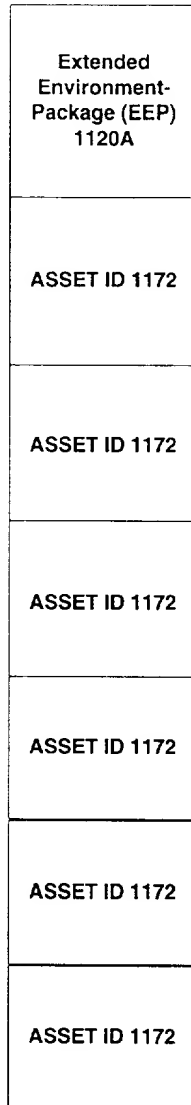
Package ID 1110	Package Timing 1150				Location (e.g. URL) 1120	Other 1163
	Immediate 1152	Delivery Start Time 1154	Delivery End Time 1156	Expire Time 1158	Remove Time 1160	Refresh Rate 1162
P1						

1105

Figure 11

Package Definition Data Structure

# 1100A



**FIGURE  
11A**



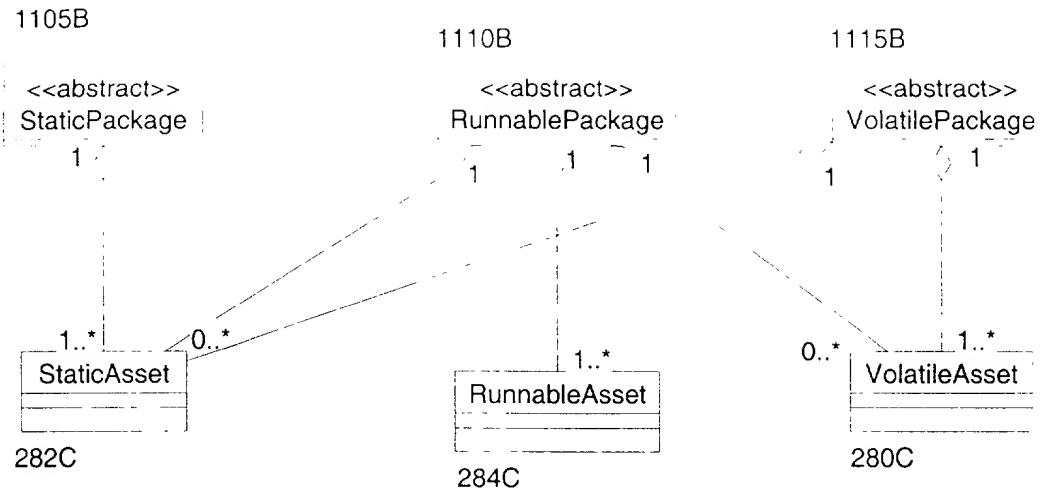
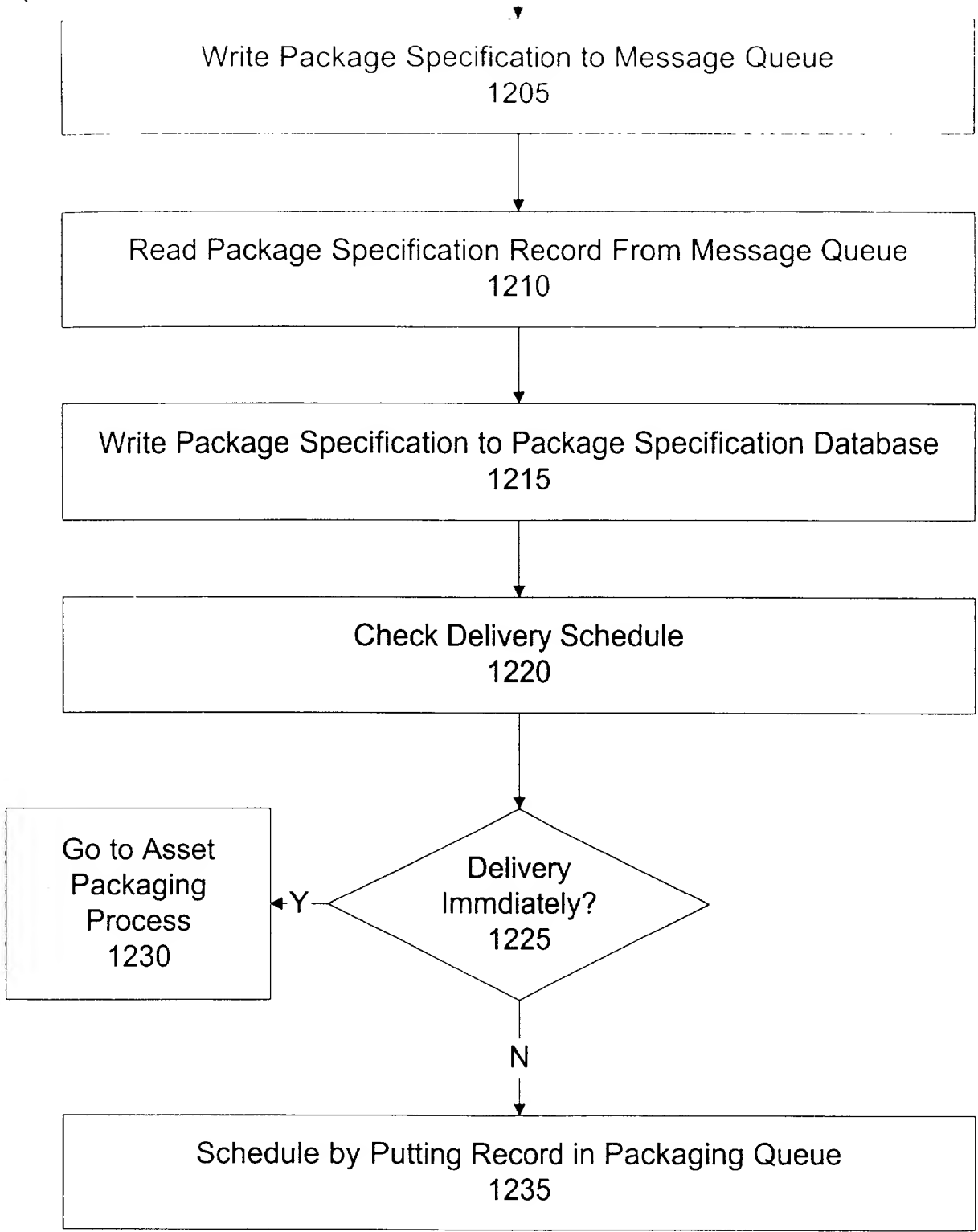


FIGURE 11B

FIG. 12 is a flowchart of the package specification process.



## Package Specification Process

Figure 12

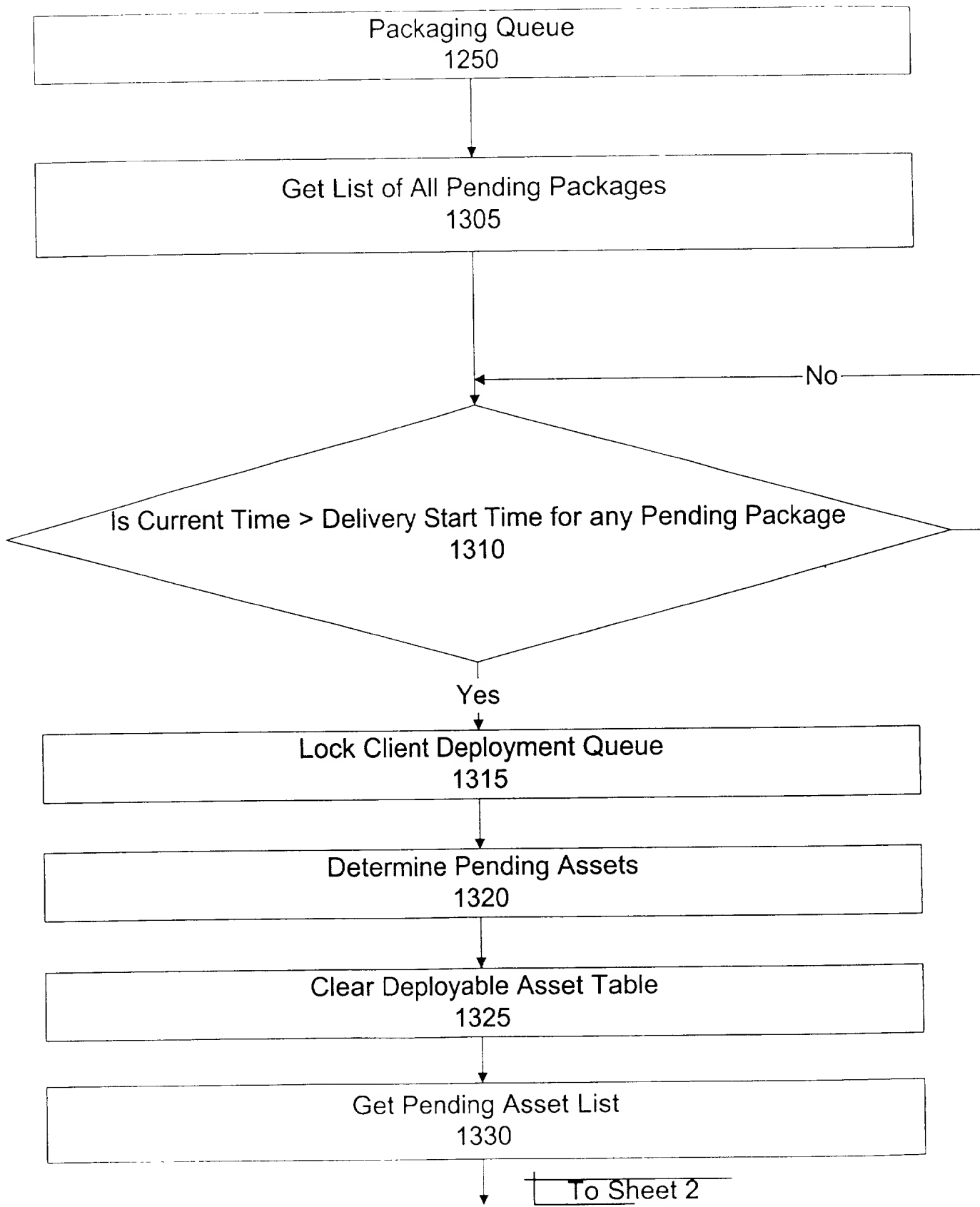
1255

Package ID 1252	Start Time 1254

Packaging Queue

Figure 12A

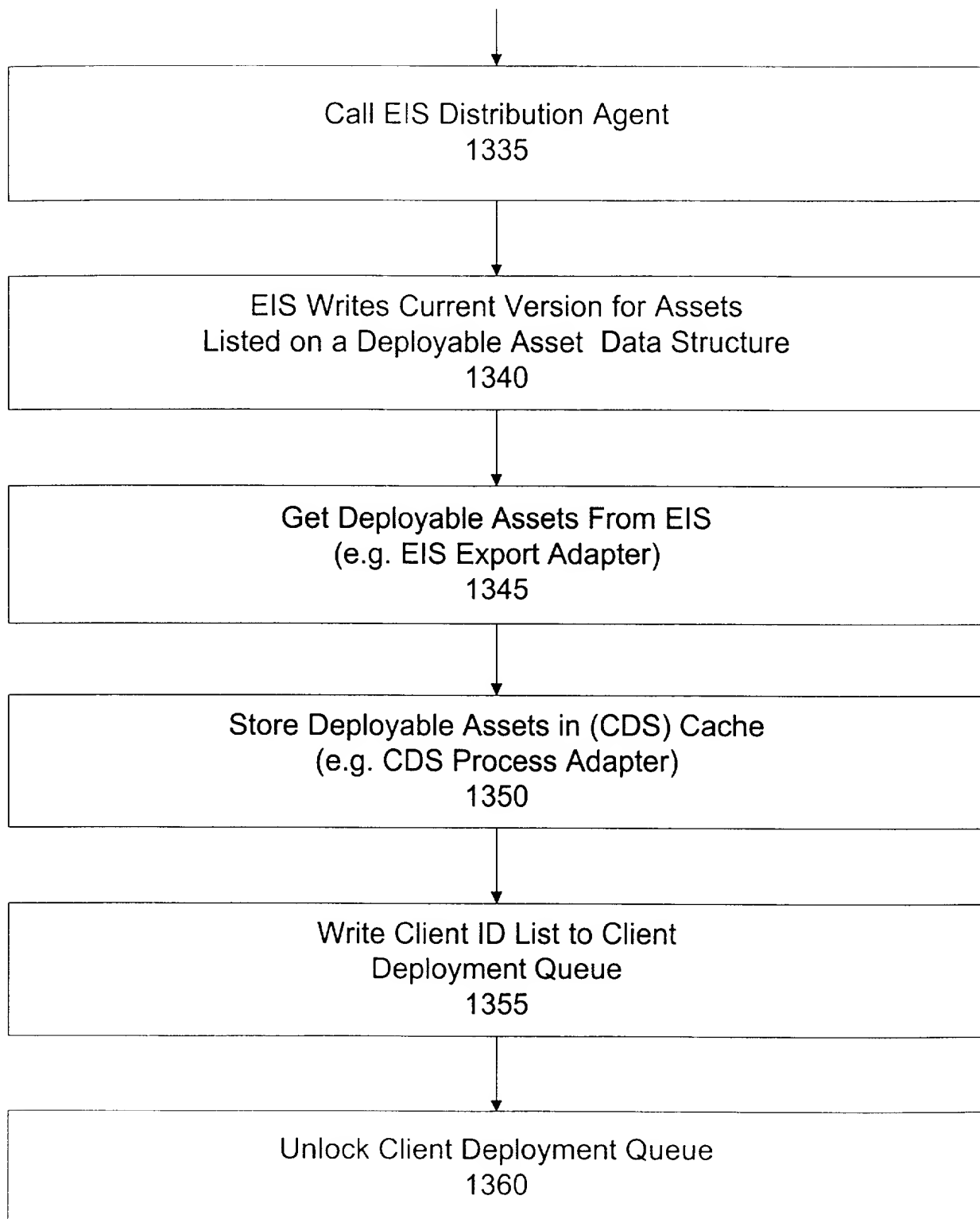
1300 1305 1310 1315 1320 1325 1330



# Asset Packaging Process

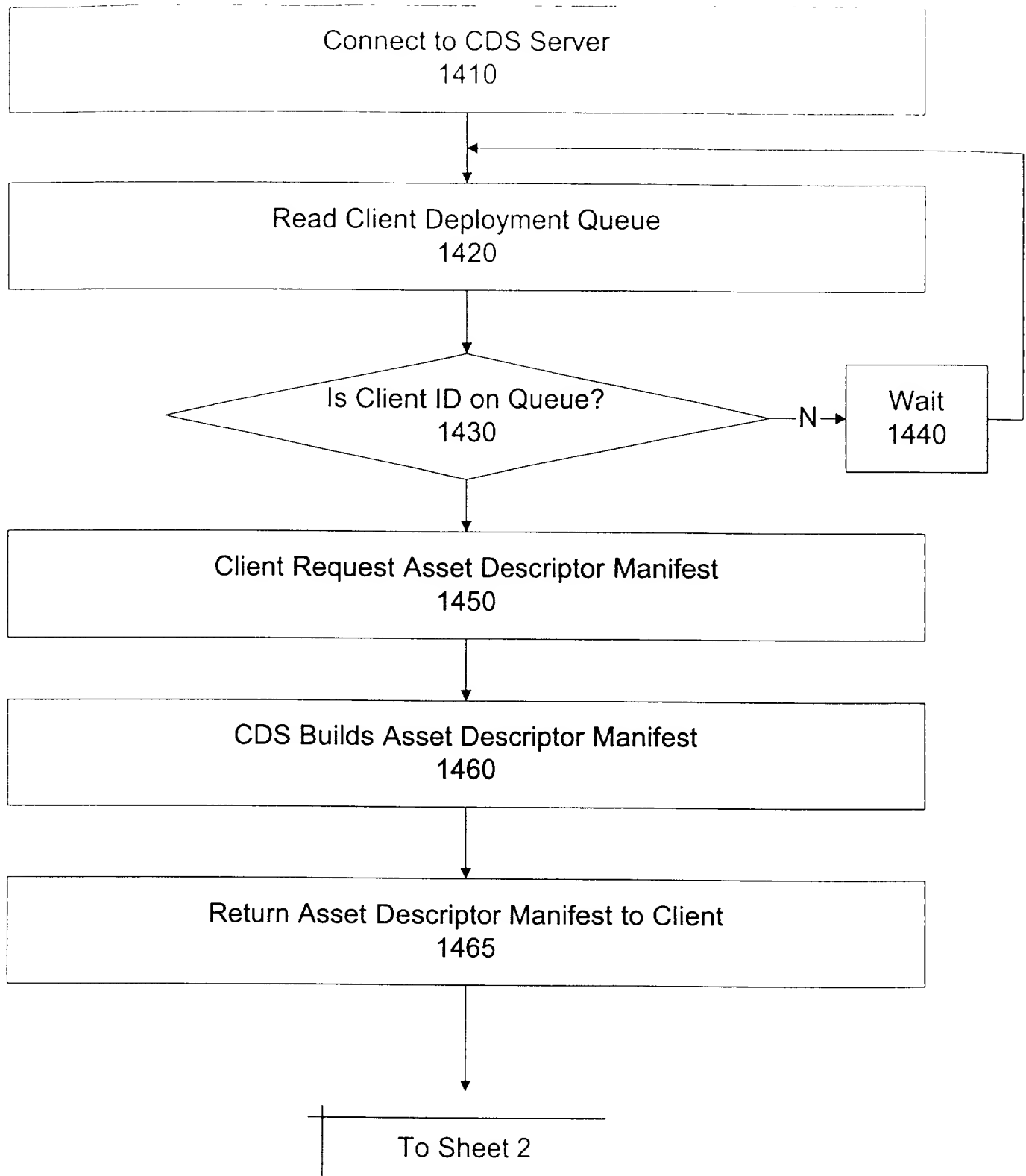
Figure 13 - Sheet 1

From Sheet 1



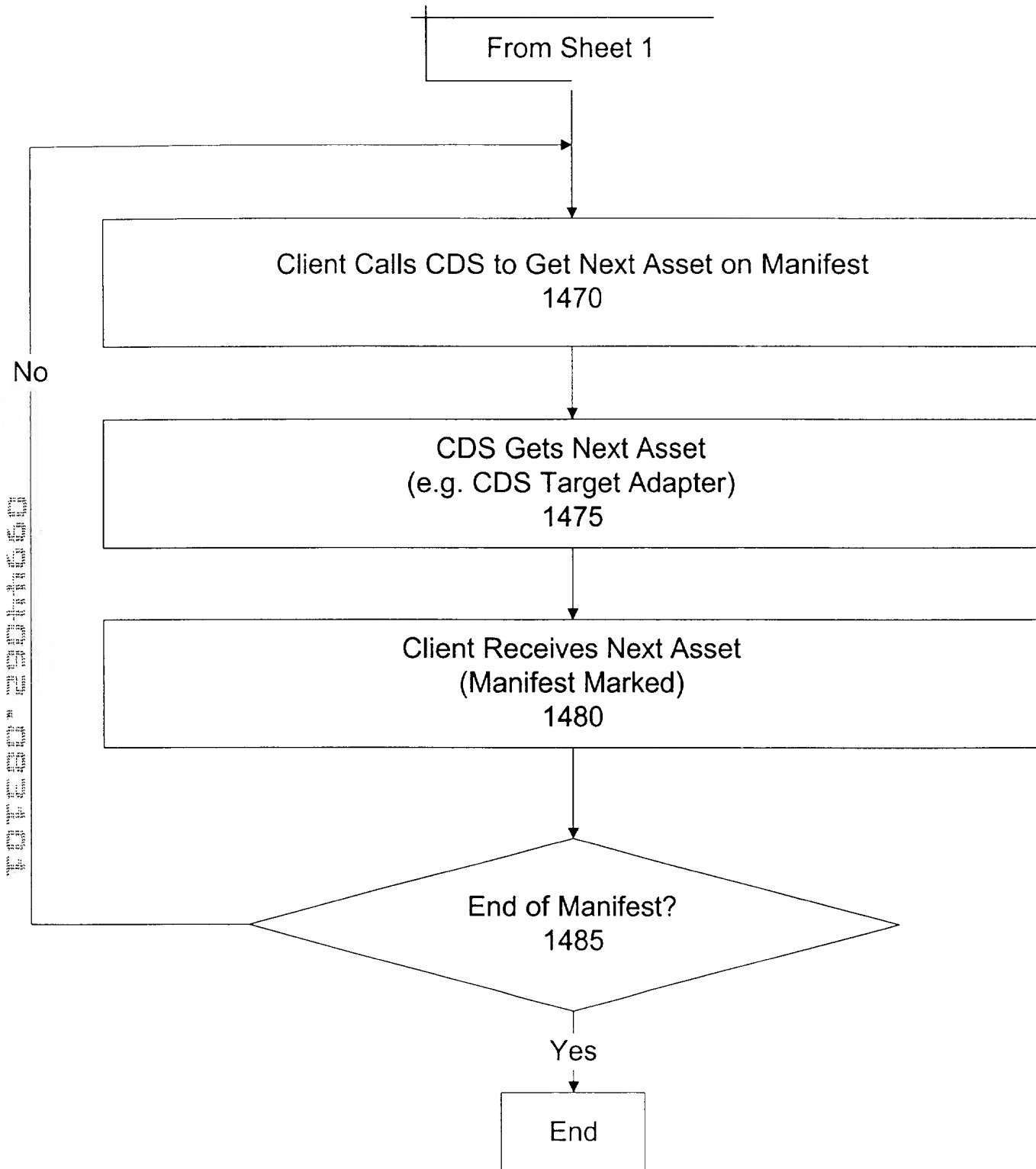
Asset Packaging Process

Figure 13 - Sheet 2



Client Deployment Process

Figure 14 - Sheet 1



Client Deployment Process

Figure 14 - Sheet 2

Client ID 1452				
Asset ID 1454	Offset 1456	Asset Type 1458 (Optional)	Cache Name 1478	Version (Timestamp) 1479

1453

1490

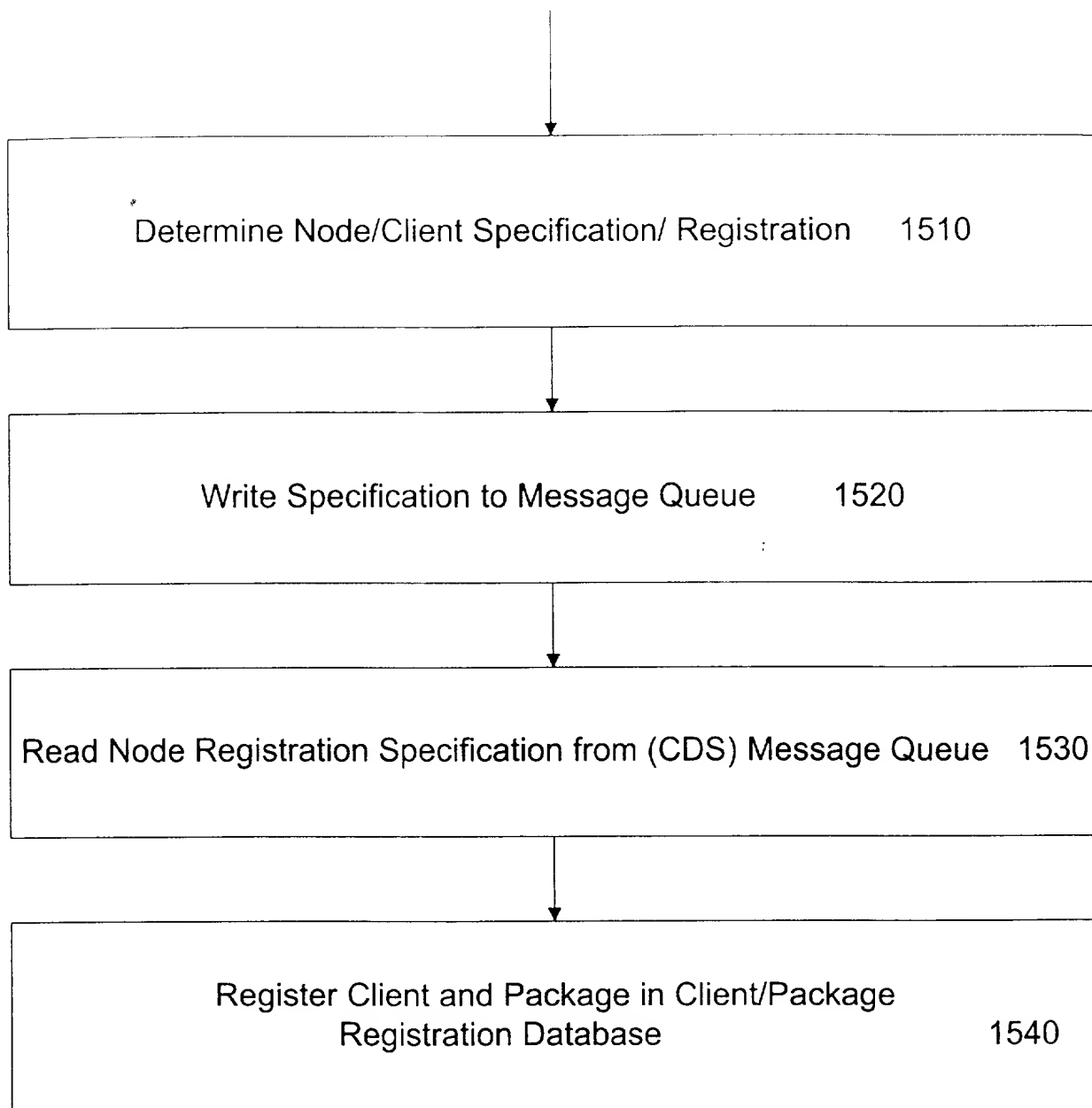
Figure 14A  
Asset Descriptor Manifest Data  
Structure



Client ID 1452	Asset ID 1454	Version (Timestamp) 1479
-------------------	------------------	--------------------------------

Client Asset Table

Figure 14B



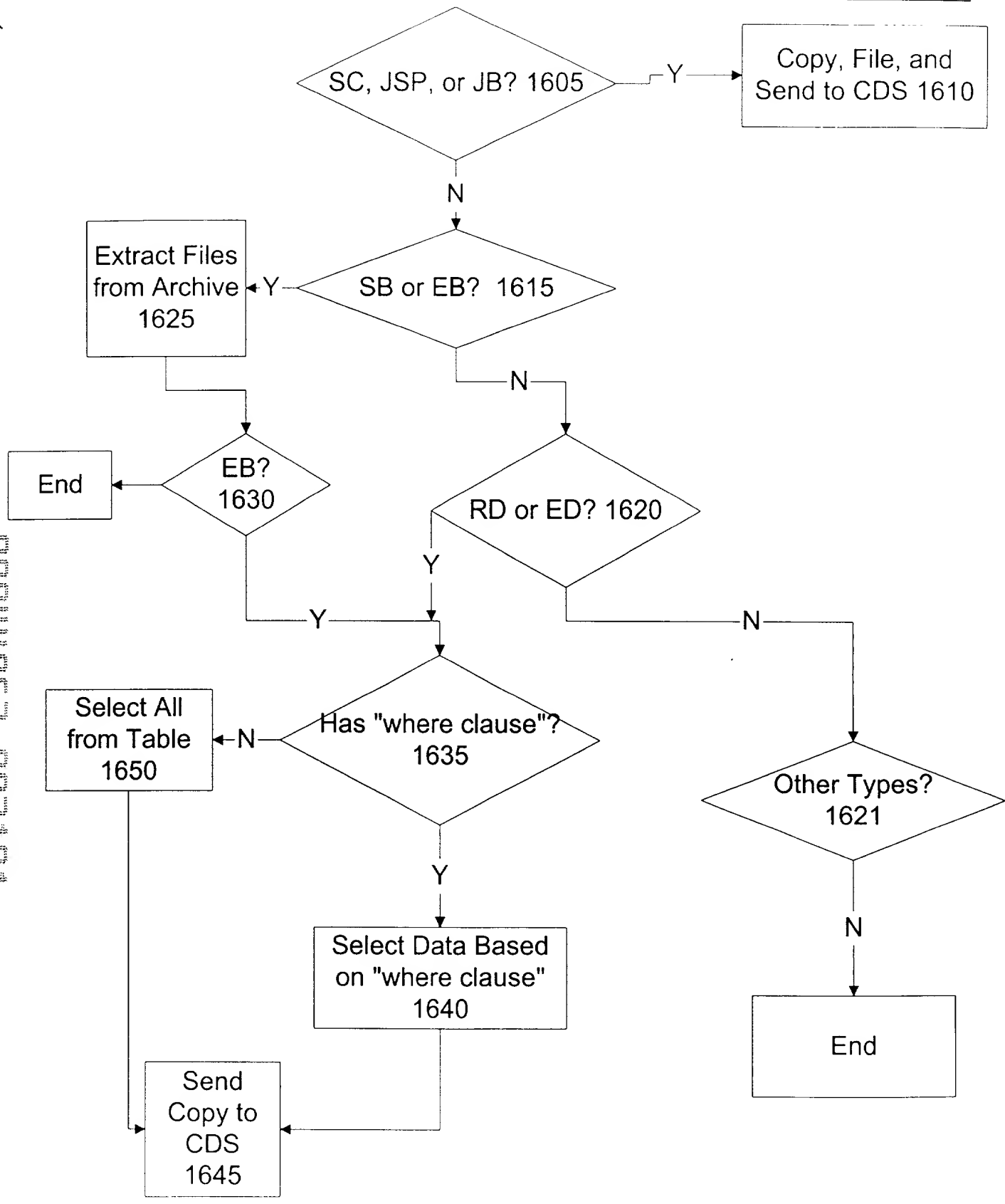
Node Registration Process

Figure 15

Node ID 1524	Package ID 1526

Node Registration Specification

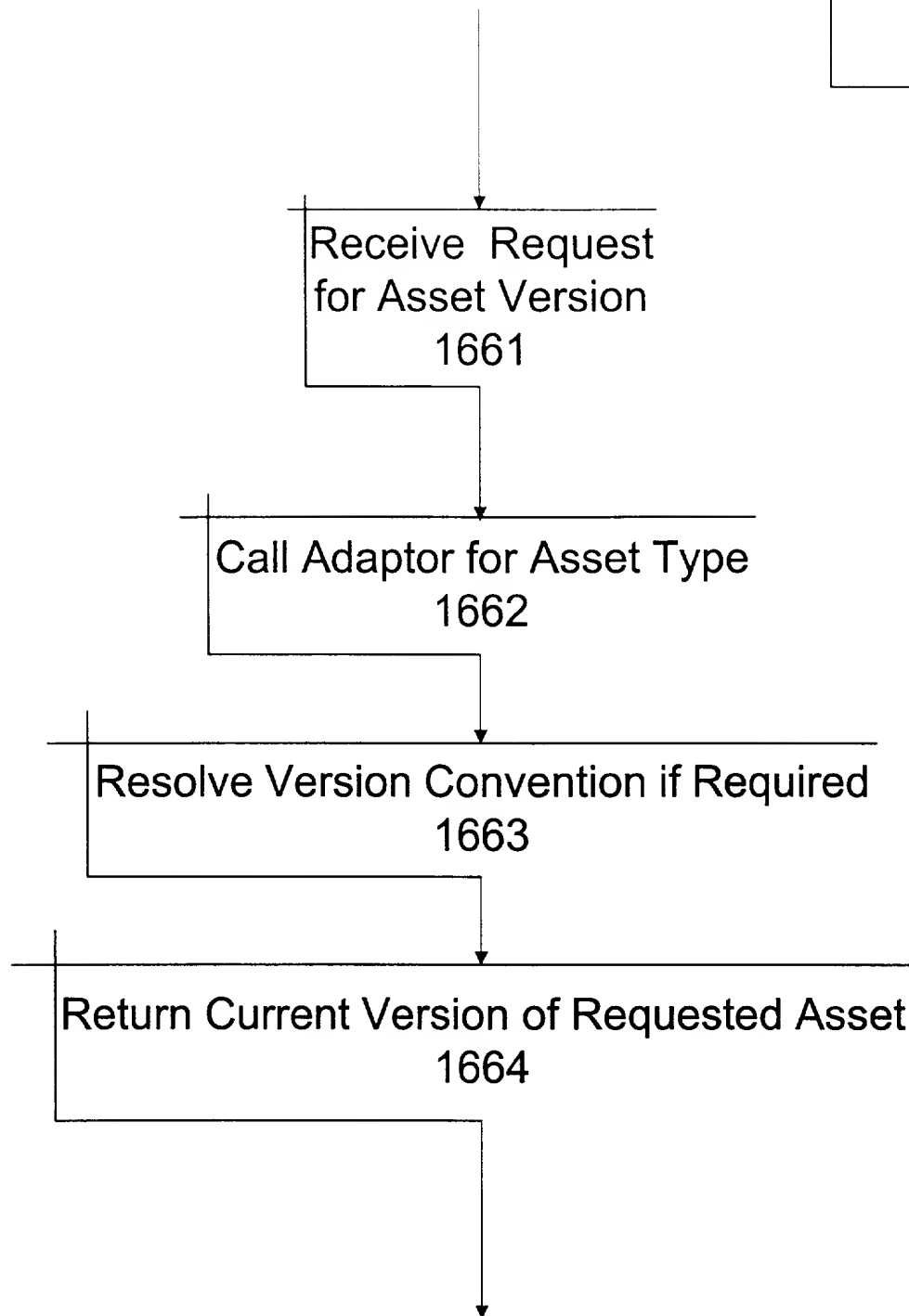
Figure 15A



Export Adapter Method

Figure 16

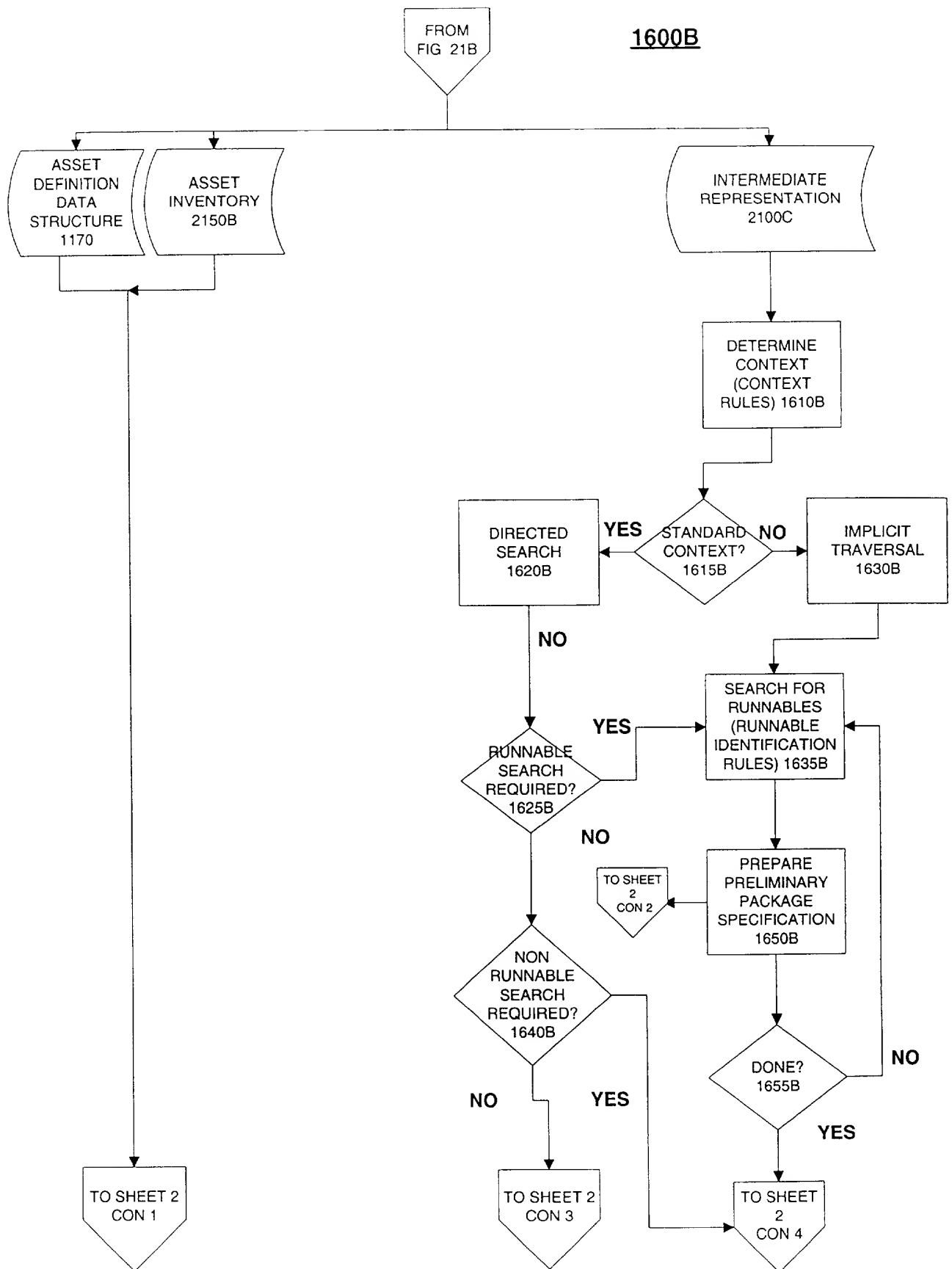
1660



Version Asset Adapter Process - VAM

Figure 16A

FIG. 16B SHEET 1



**FIG. 16B**  
**SHEET 1**

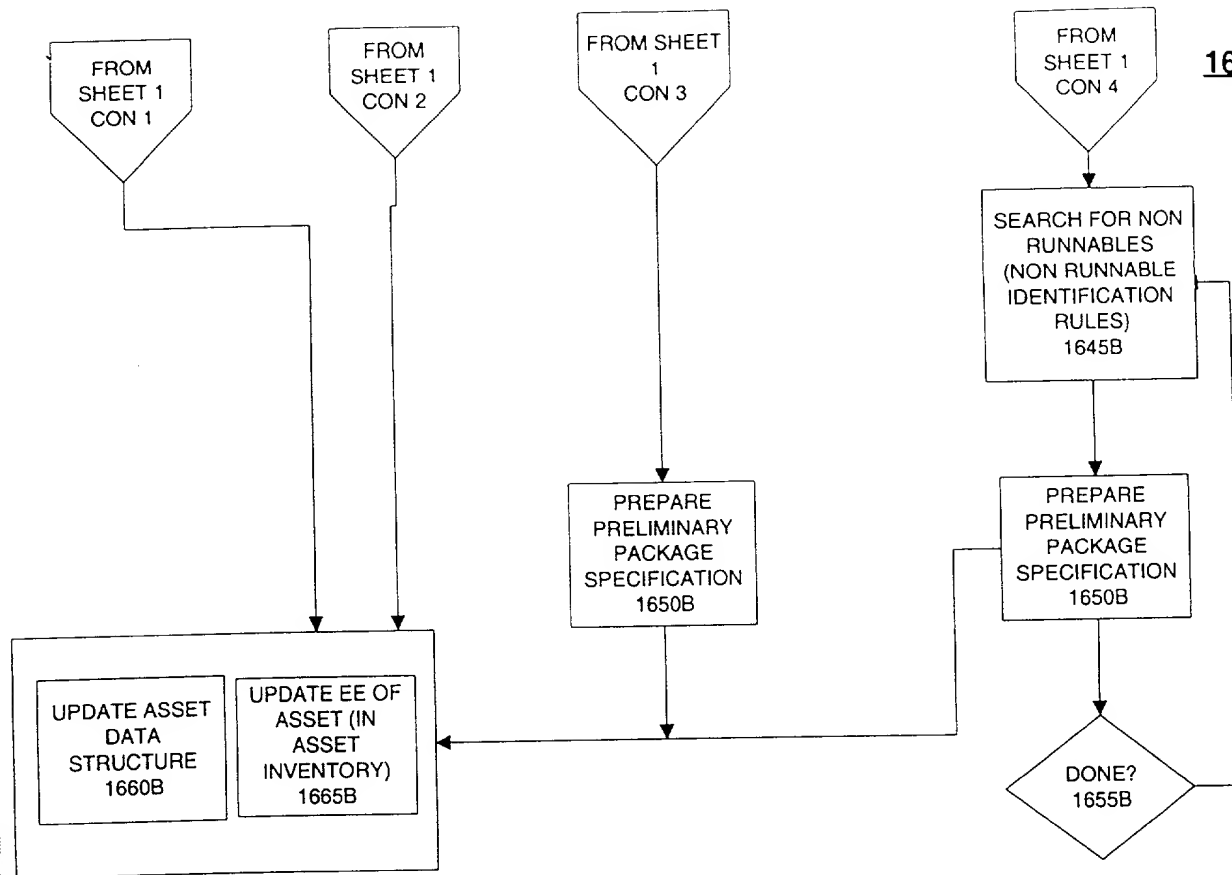
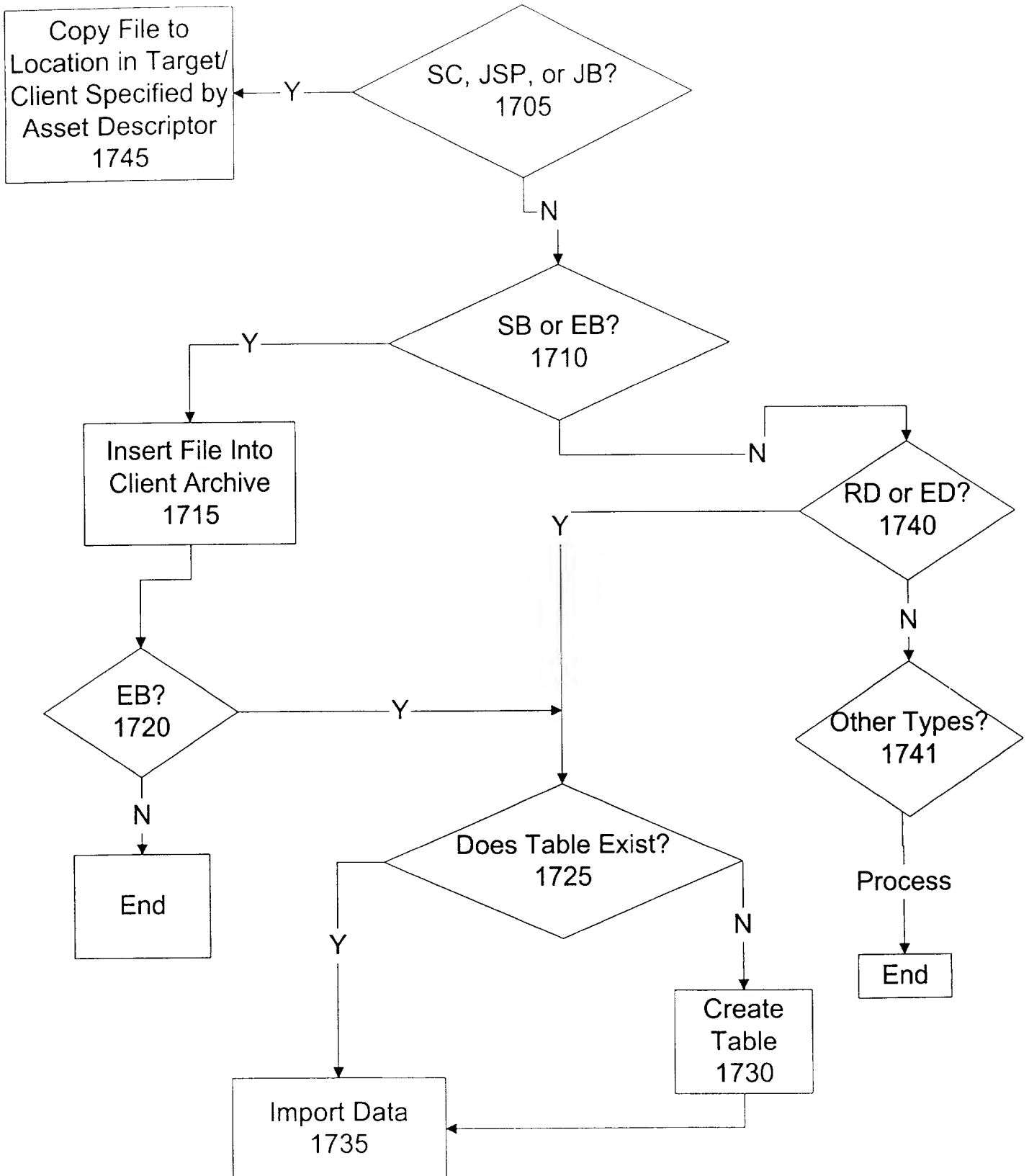


FIG. 16B  
SHEET 2

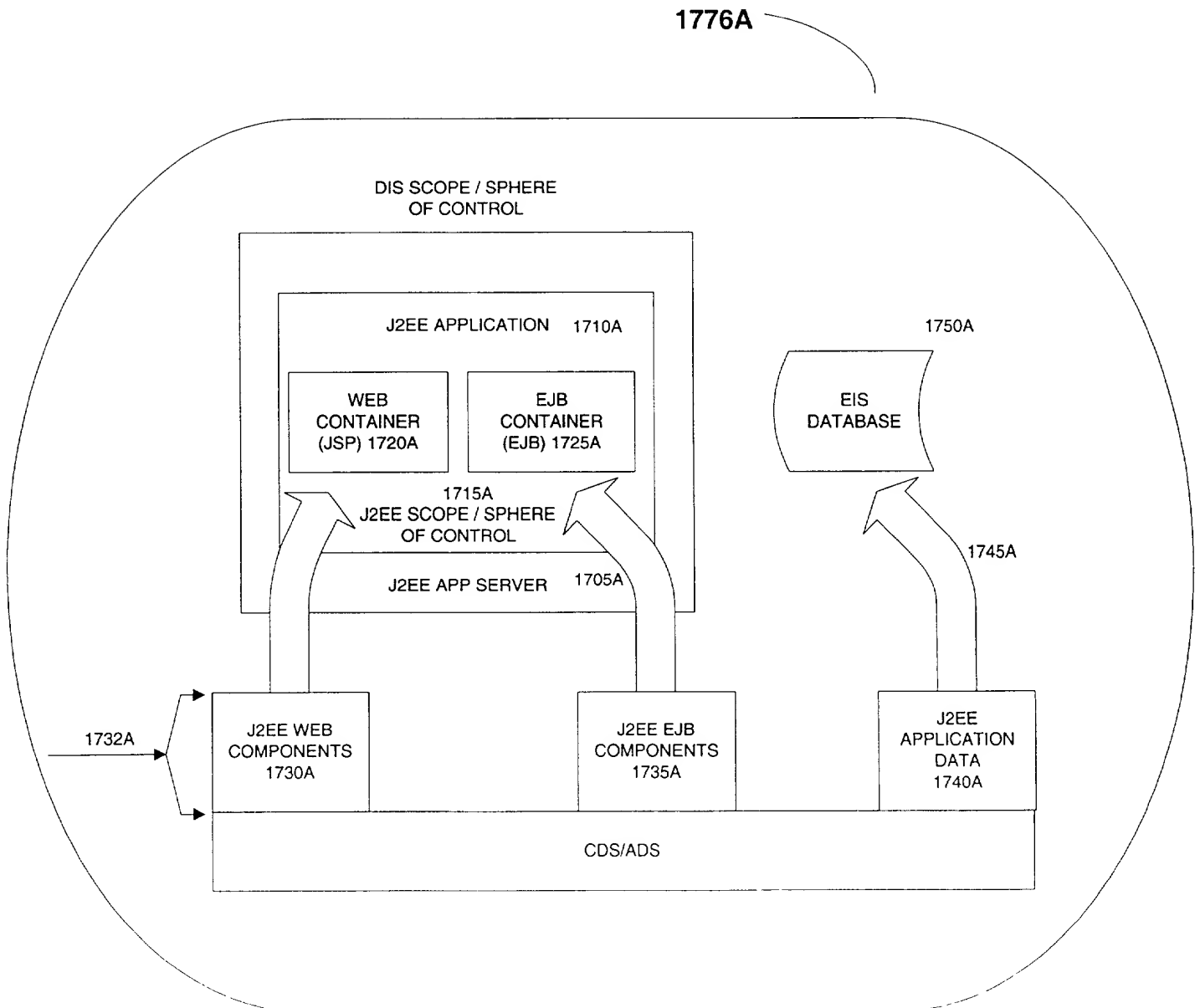




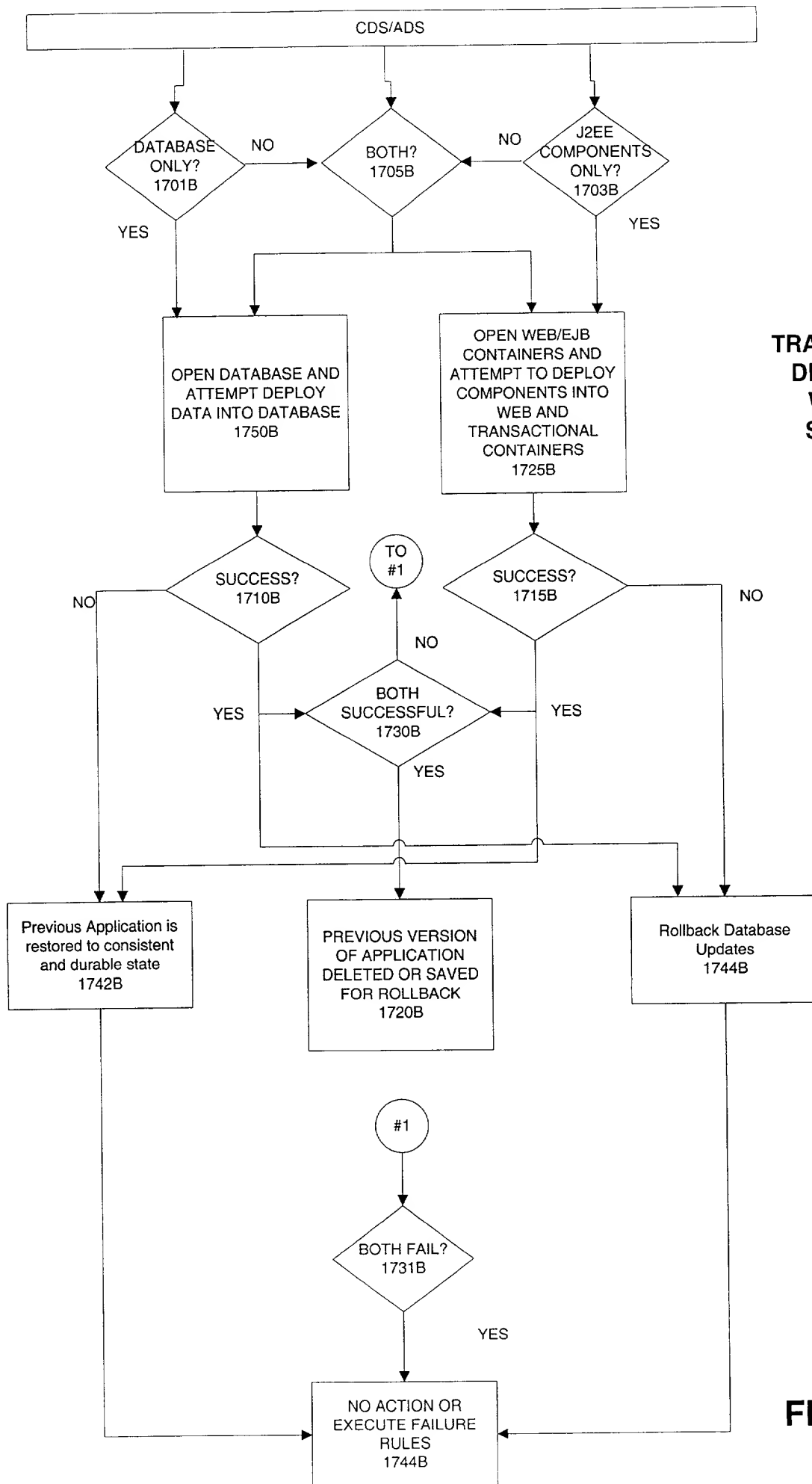
1700A

**DIS TRANSACTIONAL  
DEPLOYMENT SPHERE OF  
CONTROL**

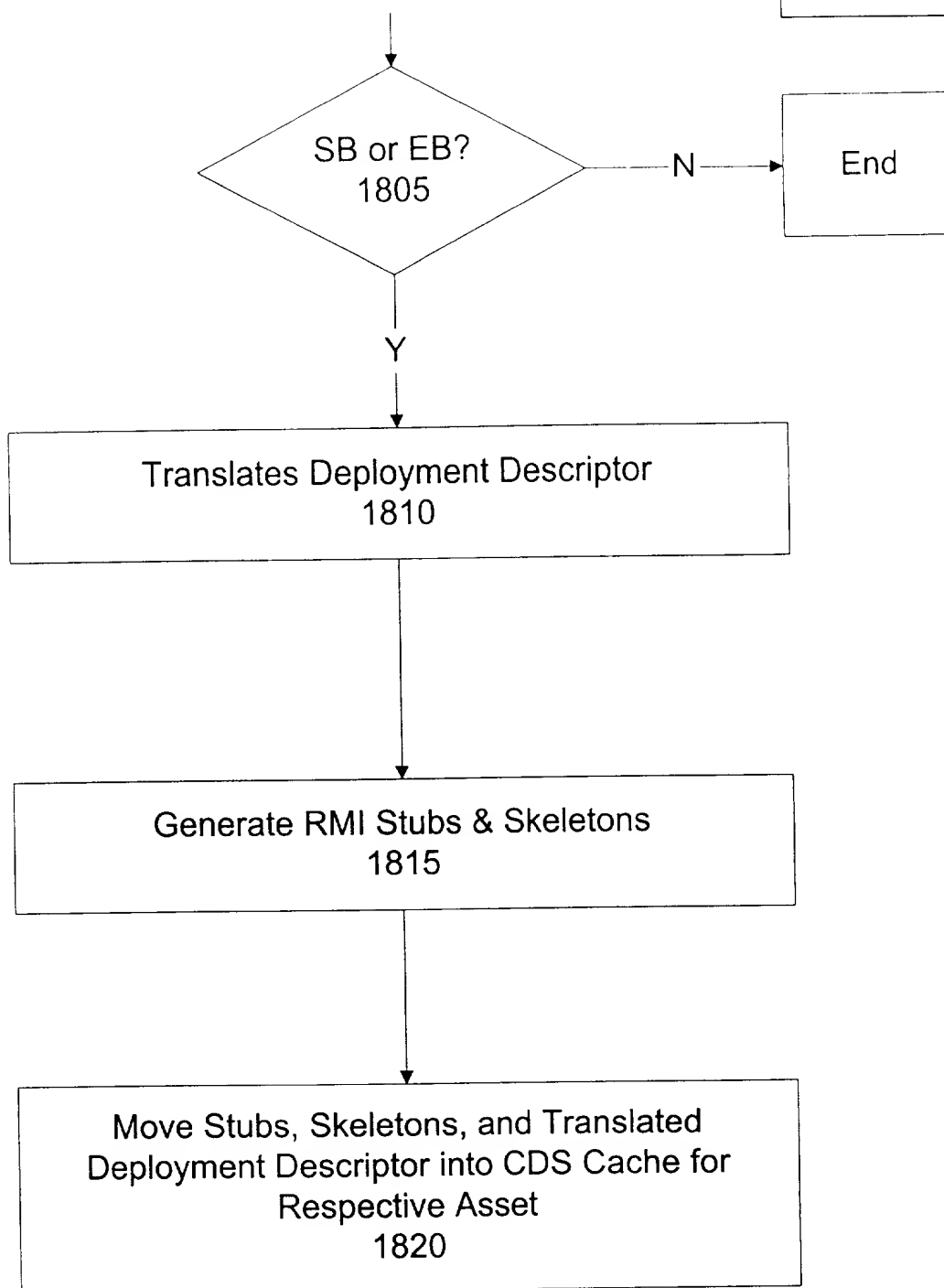
FIG. 17A



**FIGURE  
17A**

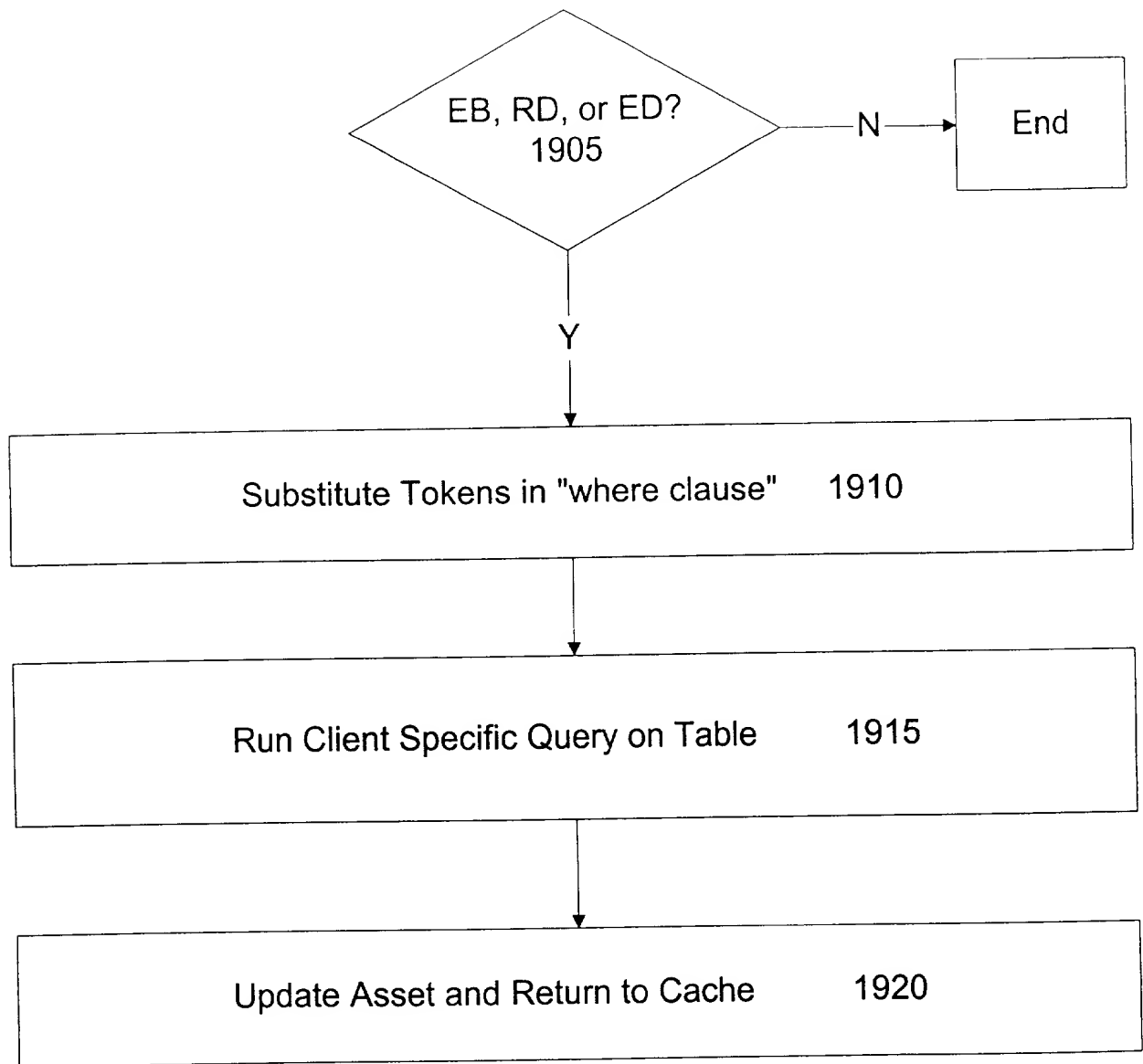


**FIGURE  
17B**



Process Adapter Method

Figure 18



Target Adapter Method

Figure 19

2000

Receive Call For Synch with  
Argument Data 2010

## Select Adapter Based on Asset Type And Pass Argument Data 2020

ED or EB?  
2030

No	
----	--

END

Yes
-----

Rcv Synch Info From Target for Asso Table 2040
---

Xfer Updated Asset to CDS  
from Target 2050

Determine Proper Source 2060

To Sheet 2

## Synchronize Asset Adapter Process

Figure 20 - Sheet 1

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2
--	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	---

From Sheet 1

2000

Send Synch Asset to Source 2070

Select Source Adaptor by  
Asset Type 2080

ED or EB?  
2095

NO

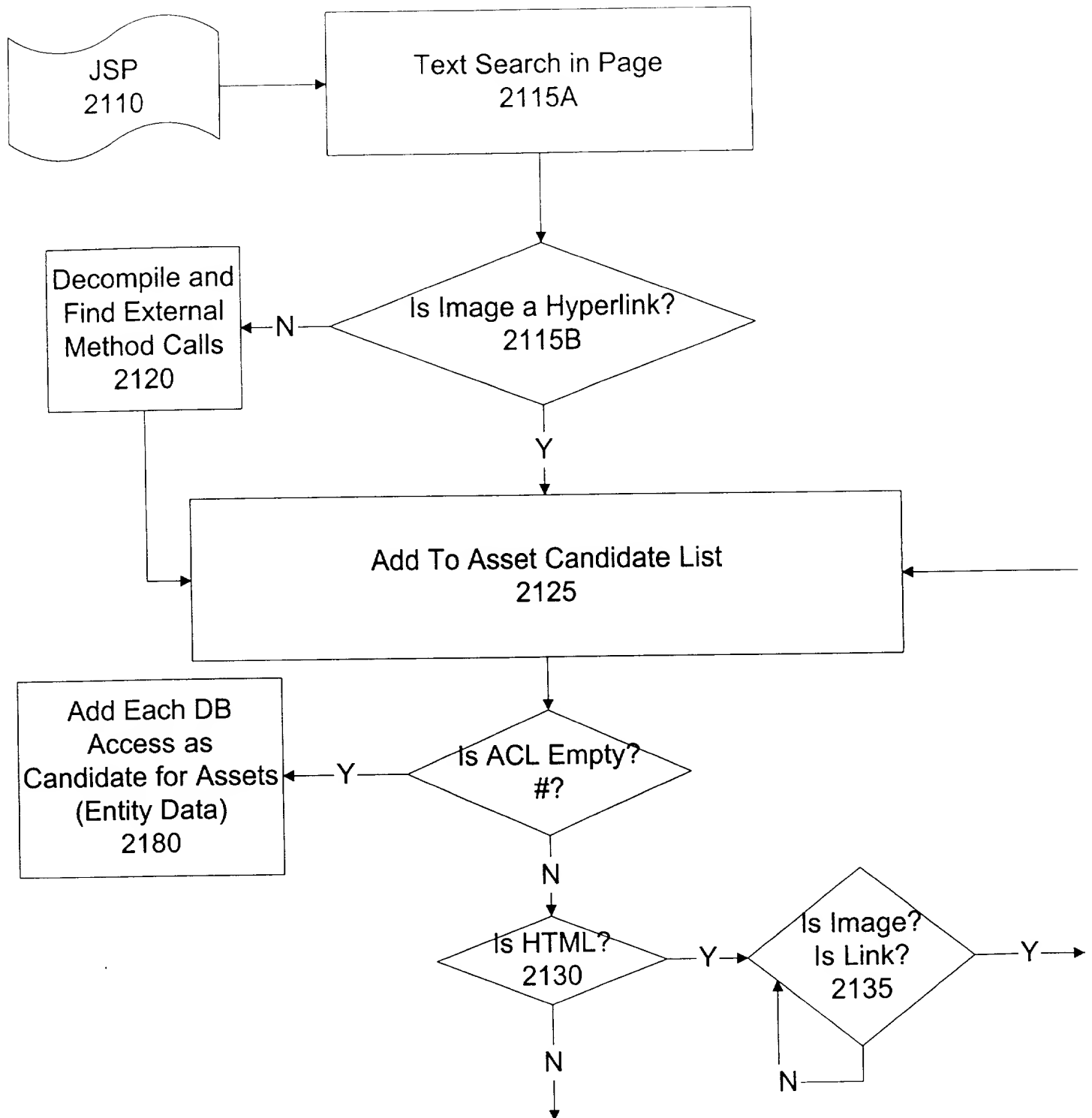
End

Yes

Update LD and/or EE  
at Source 2095

Synchronize Asset Adapter Process

Figure 20 - Sheet 2



To Sheet 2

From Sheet 2

Discovery Asset Adapter Method

Figure 21 - Sheet 1

From Sheet 1

To Sheet 1

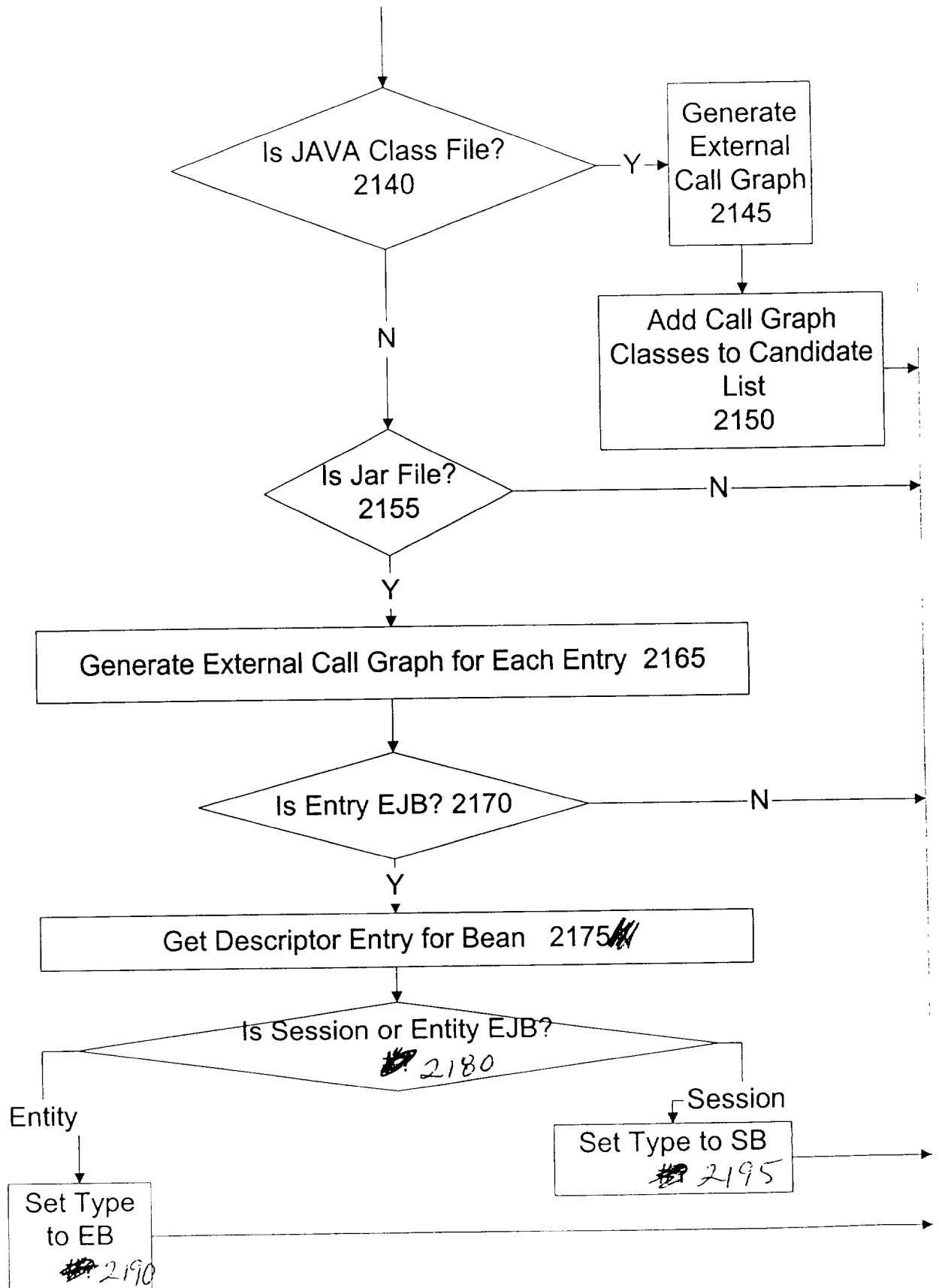
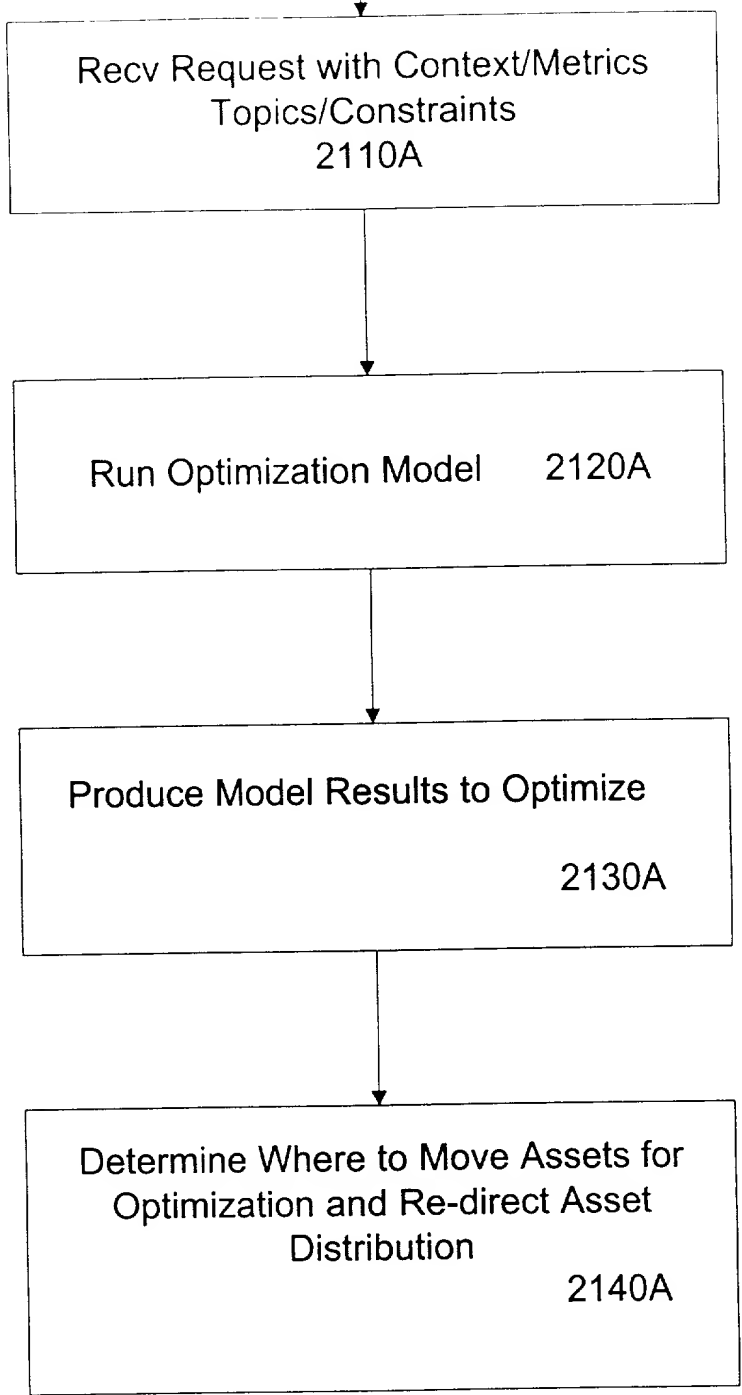


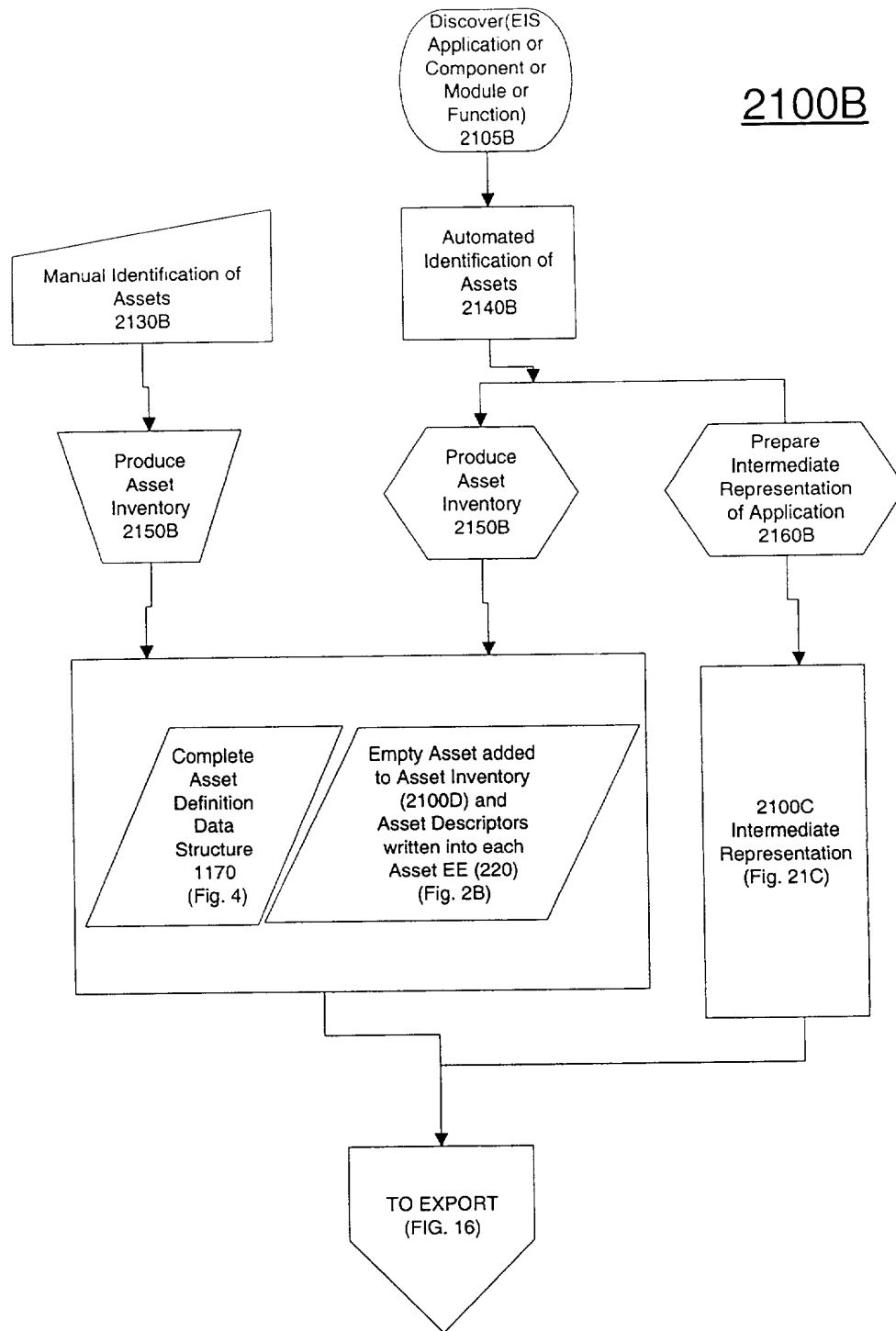
Figure 21-Sheet 2



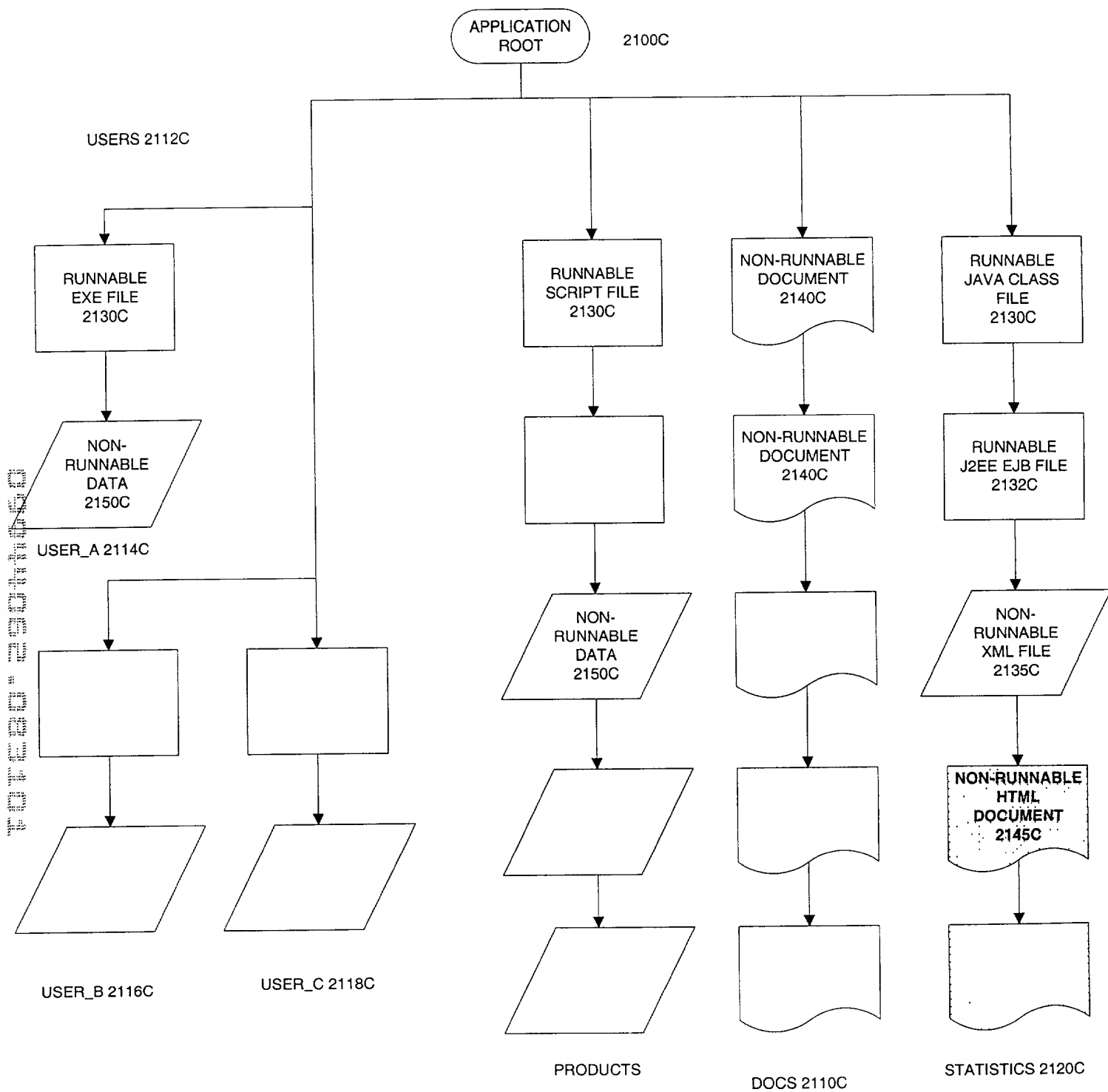


# Adjustment Asset Adapter Process

Figure 21A



**FIGURE  
21B**



PRIOR ART

**FIGURE**

**21C**

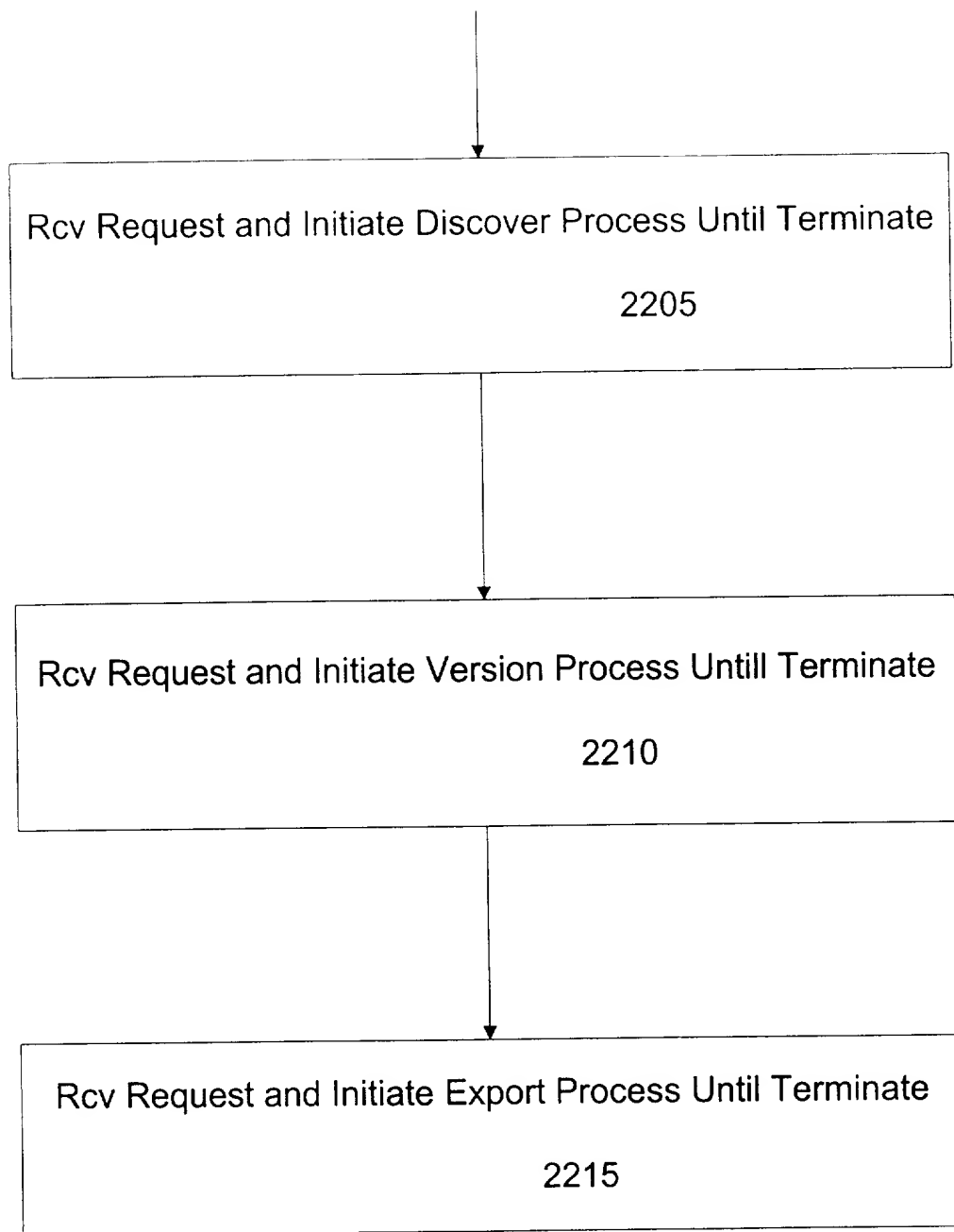
**2100D**

2100D-2100D

<b>EE 220</b>	<b>ASSET INTERFACE 230 (OPTIONAL)</b>	<b>LOGIC/ DATA (LD) 210</b>
<b>EE 220</b>	<b>ASSET INTERFACE 230 (OPTIONAL)</b>	<b>LOGIC/ DATA (LD) 210</b>
<b>EE 220</b>	<b>ASSET INTERFACE 230 (OPTIONAL)</b>	<b>LOGIC/ DATA (LD) 210</b>
<b>EE 220</b>	<b>ASSET INTERFACE 230 (OPTIONAL)</b>	<b>LOGIC/ DATA (LD) 210</b>
<b>EE 220</b>	<b>ASSET INTERFACE 230 (OPTIONAL)</b>	<b>LOGIC/ DATA (LD) 210</b>
<b>EE 220</b>	<b>ASSET INTERFACE 230 (OPTIONAL)</b>	<b>LOGIC/ DATA (LD) 210</b>
<b>EE 220</b>	<b>ASSET INTERFACE 230 (OPTIONAL)</b>	<b>LOGIC/ DATA (LD) 210</b>

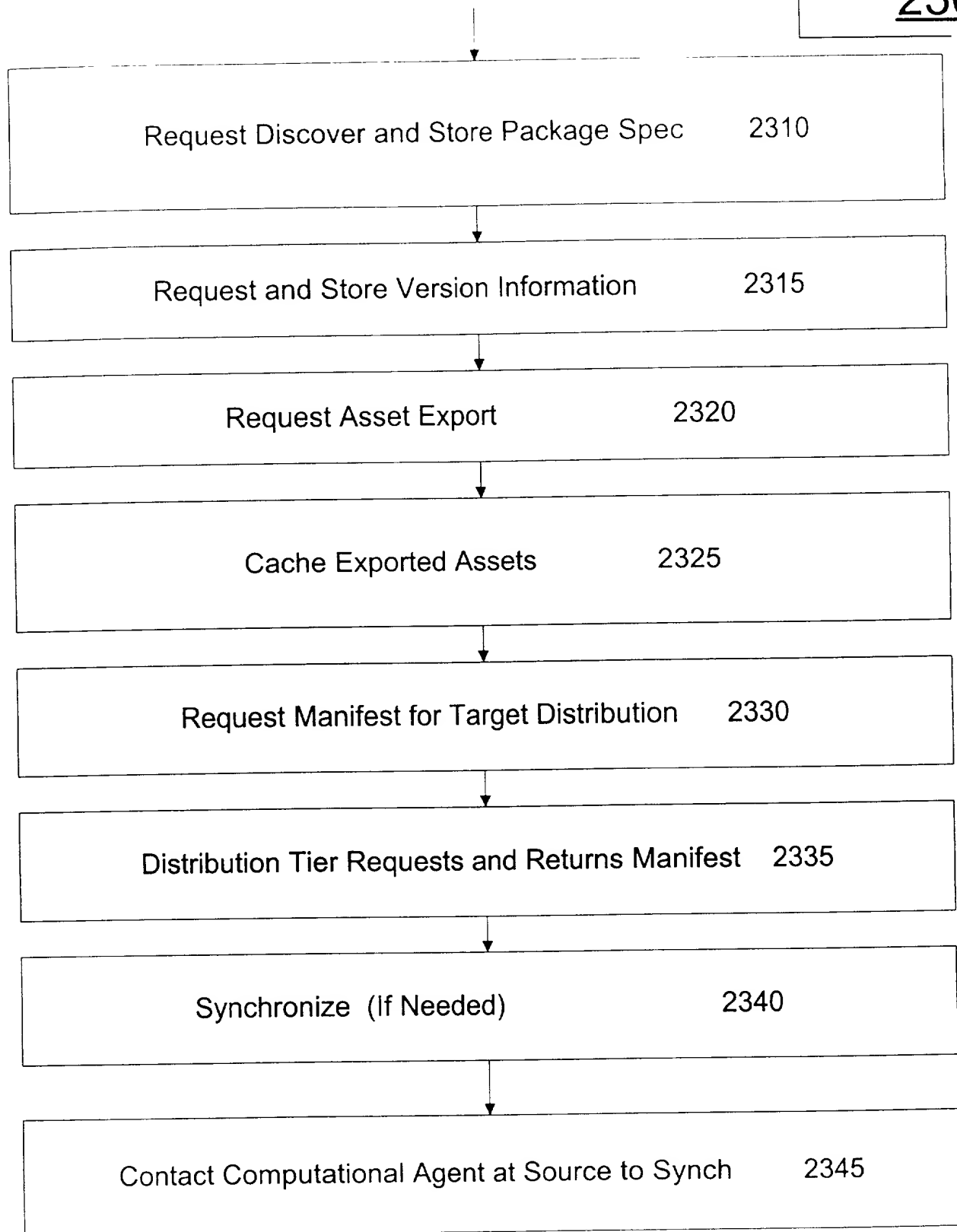


**FIGURE  
21D**



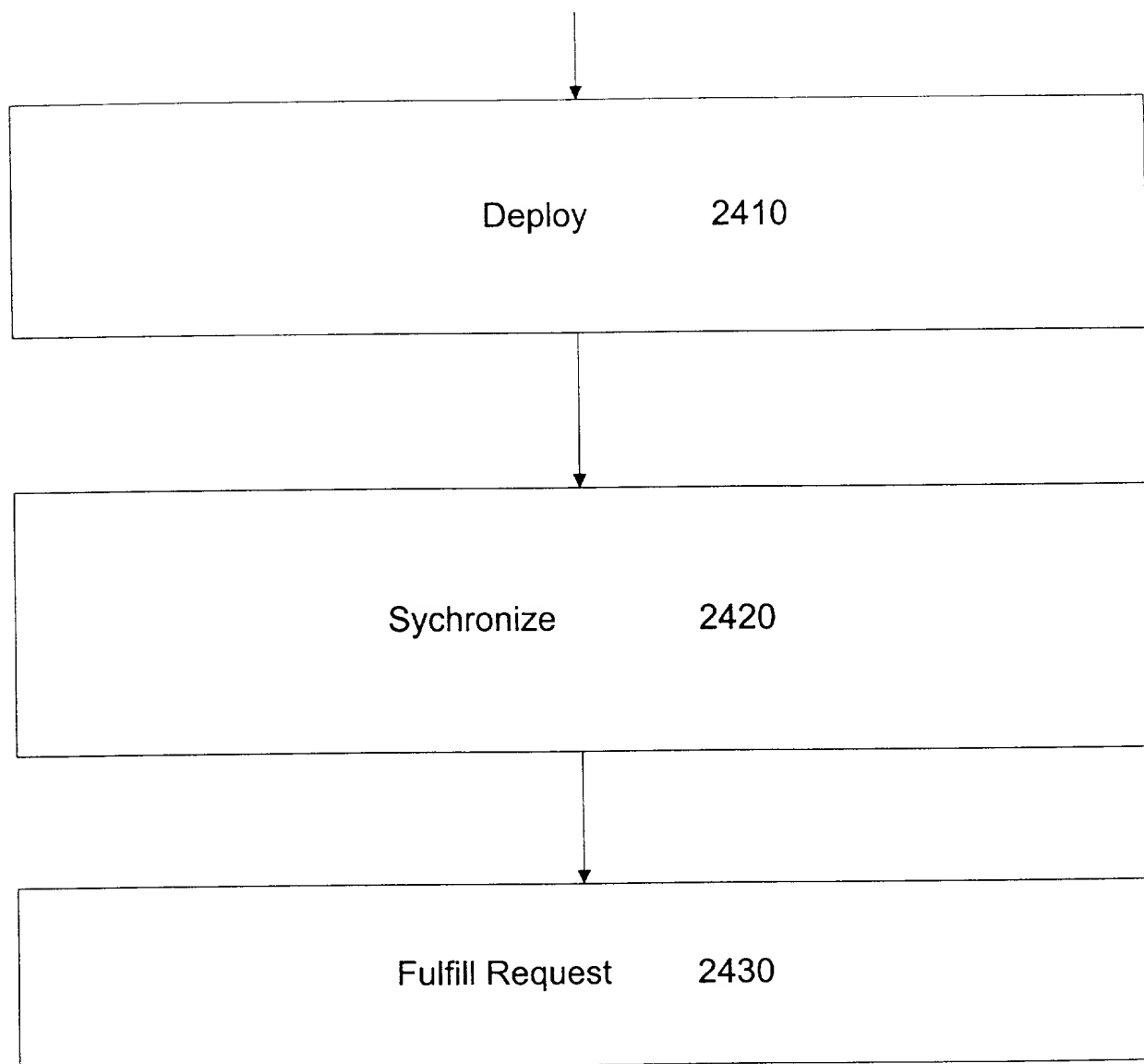
Publishing Agent Method

Figure 22



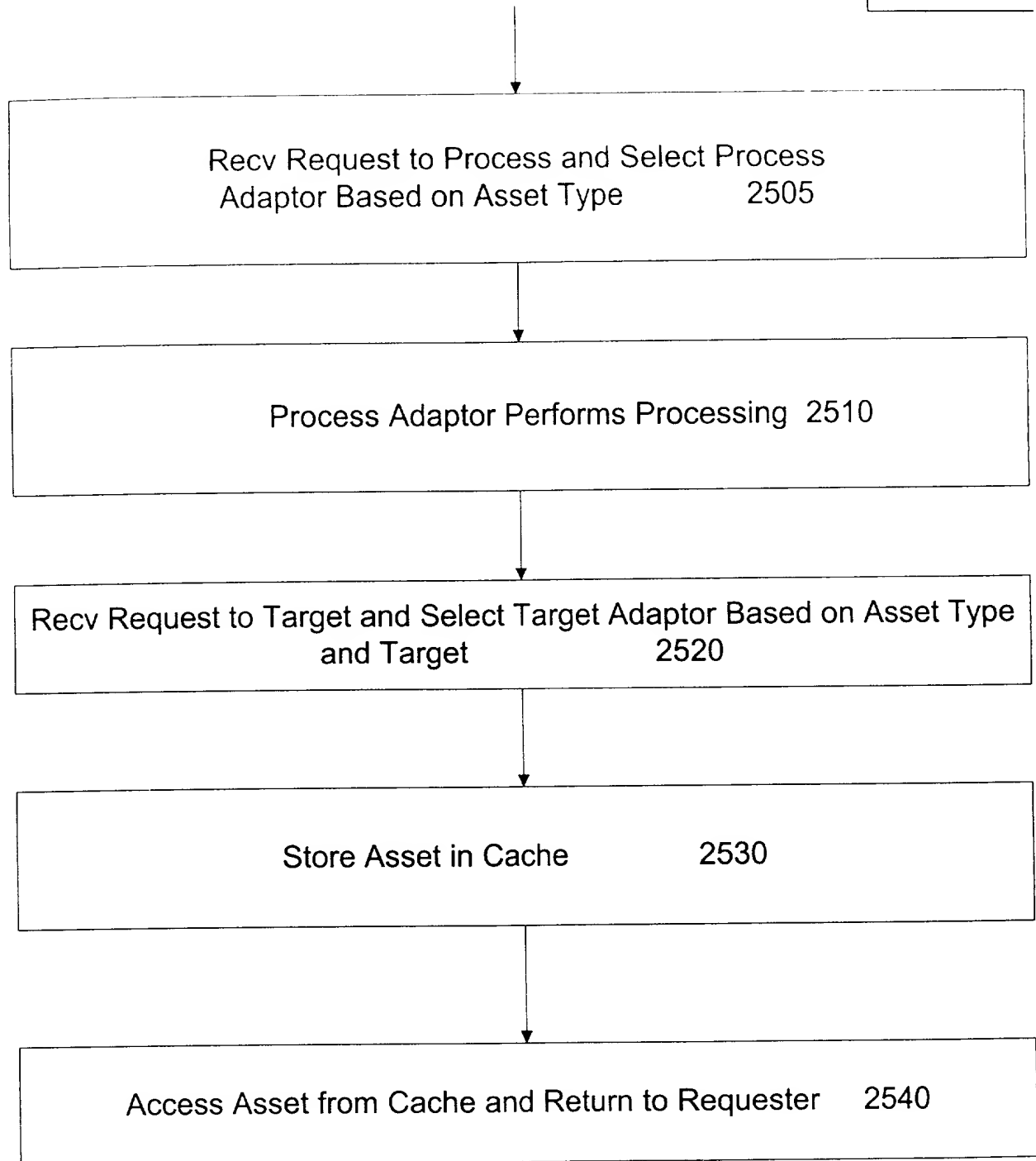
Subscriber Agent Method

Figure 23



Computational Agent Method

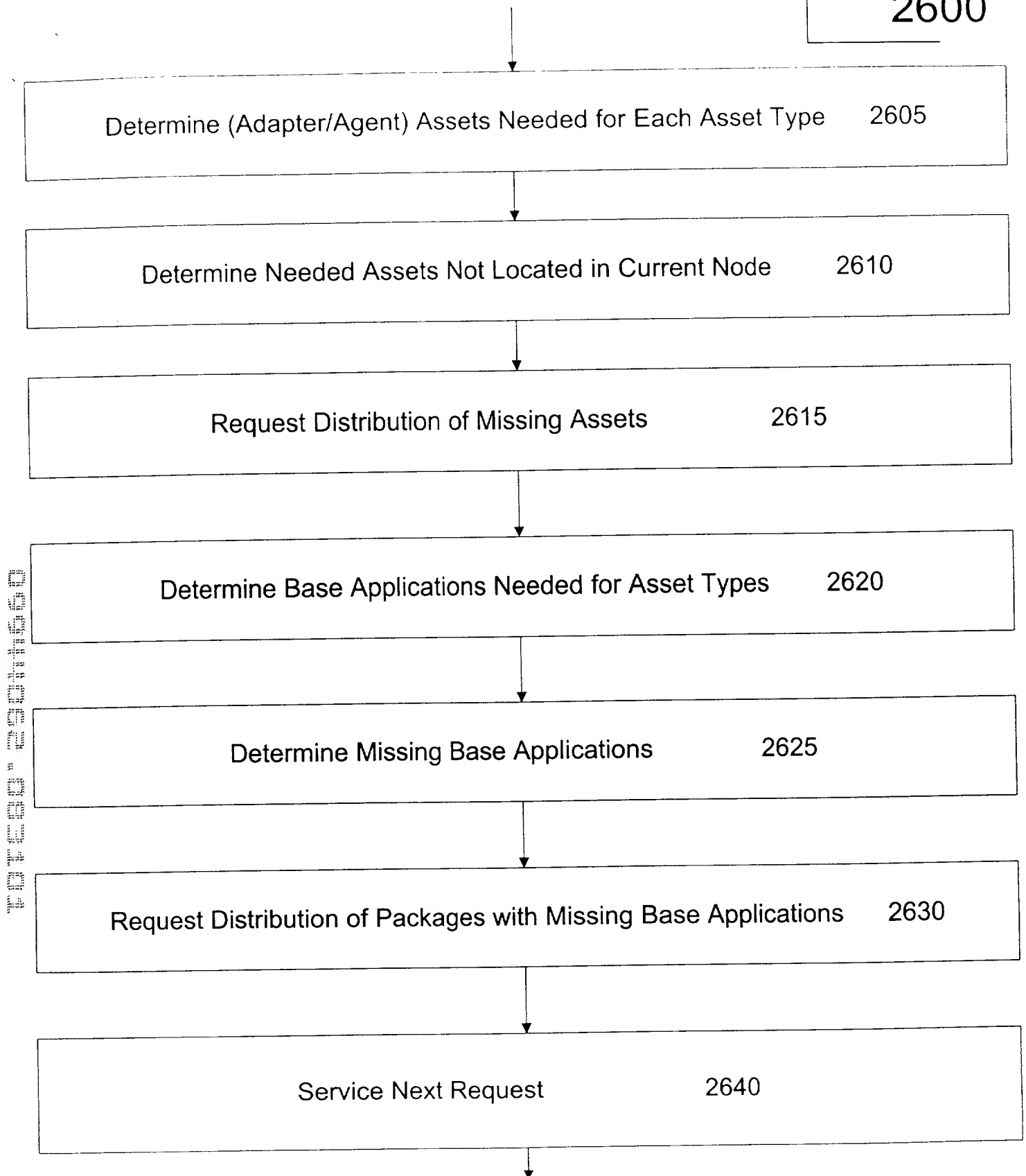
Figure 24



Caching Agent Method

Figure 25





System Asset Distribution Process

Figure 26

2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743 2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755

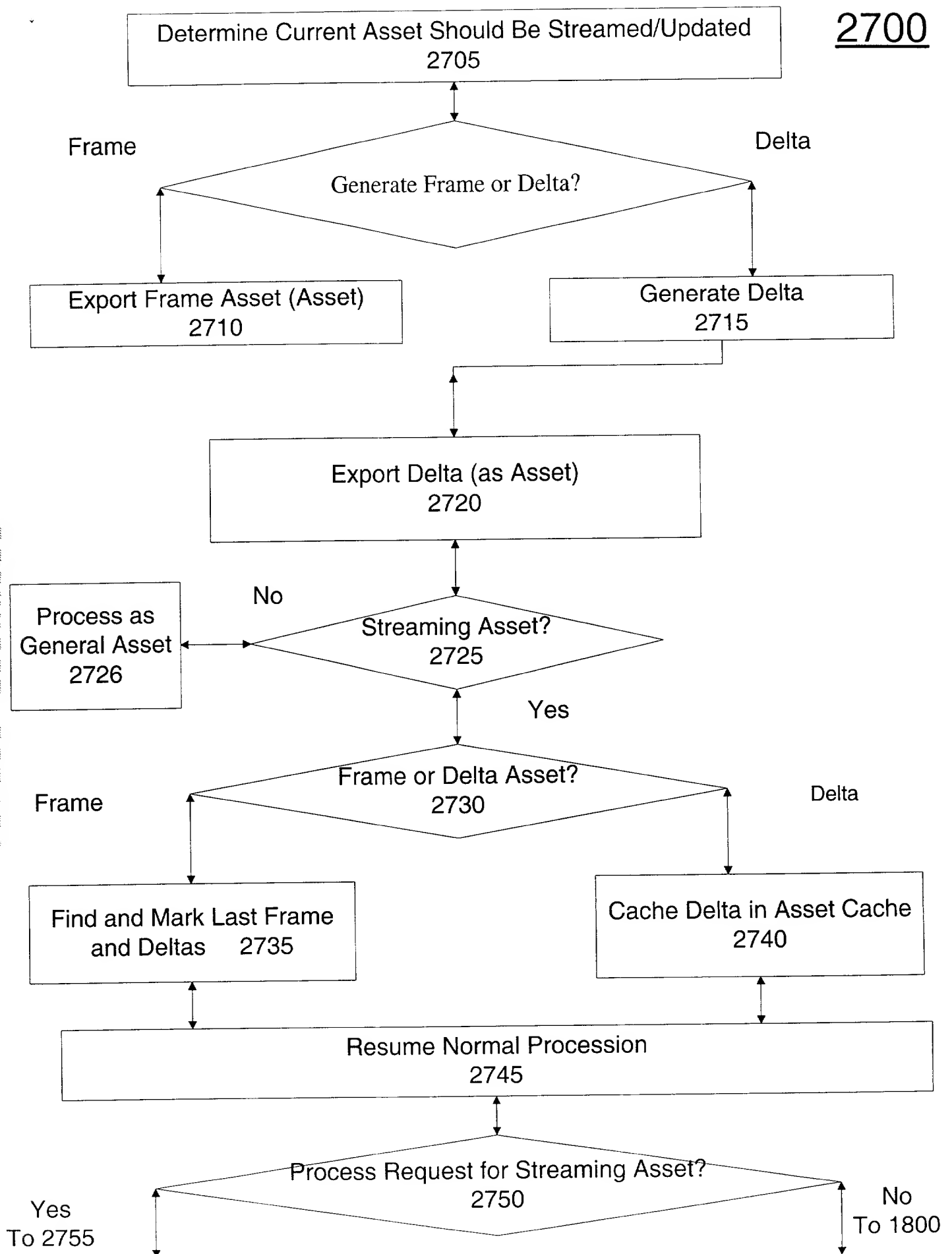


Figure 27- Sheet 1

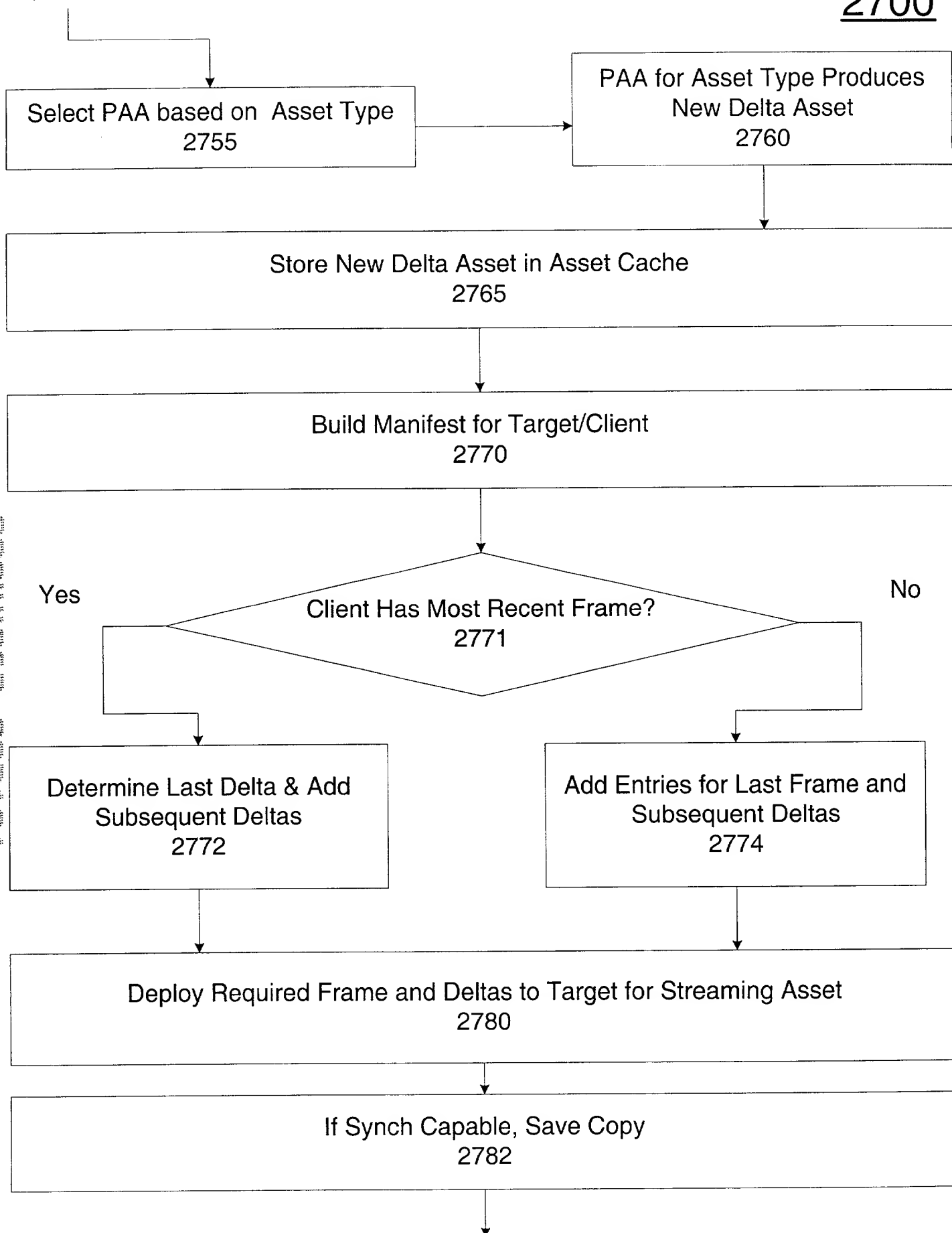


Figure 27-Sheet 2

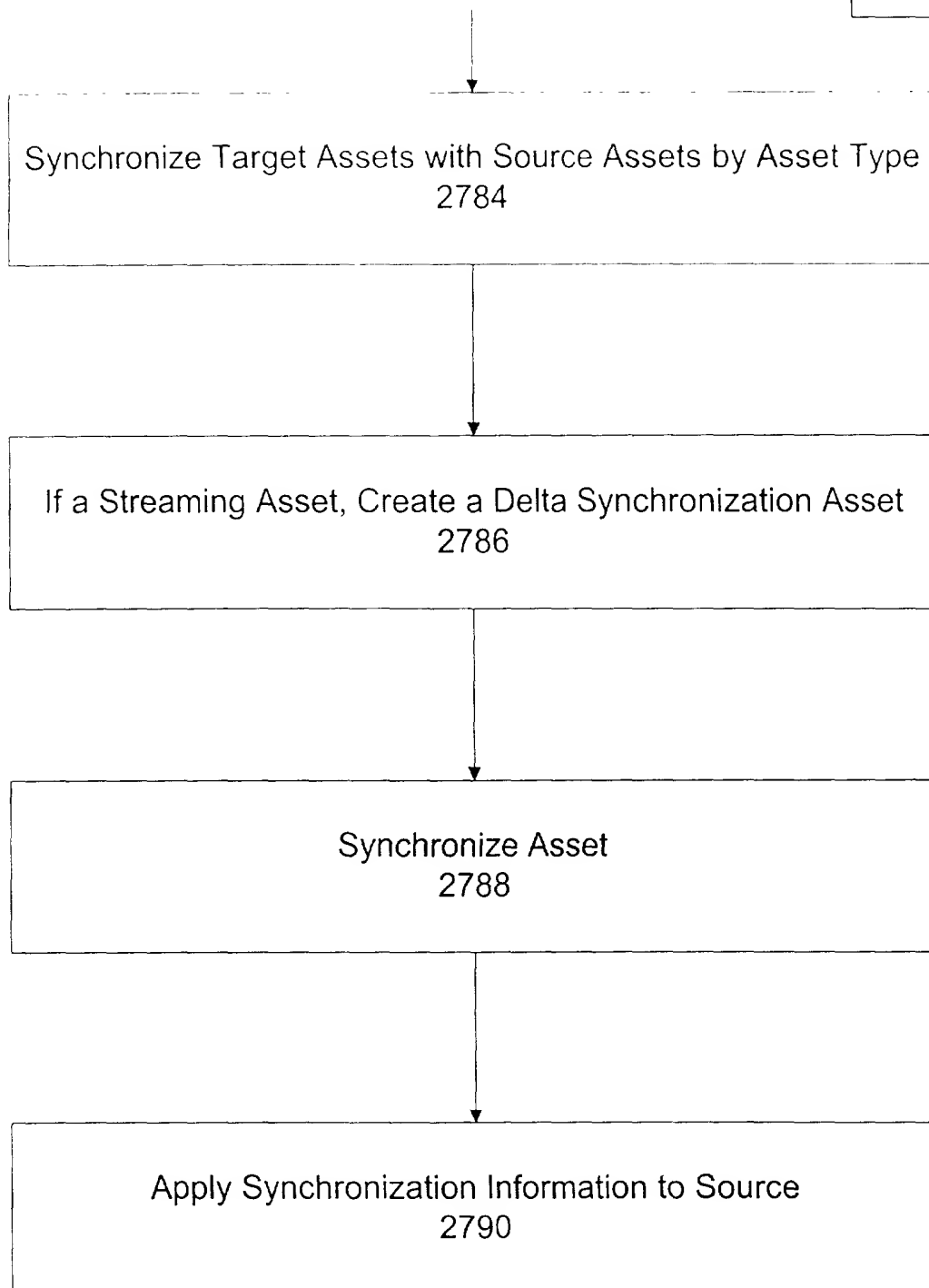
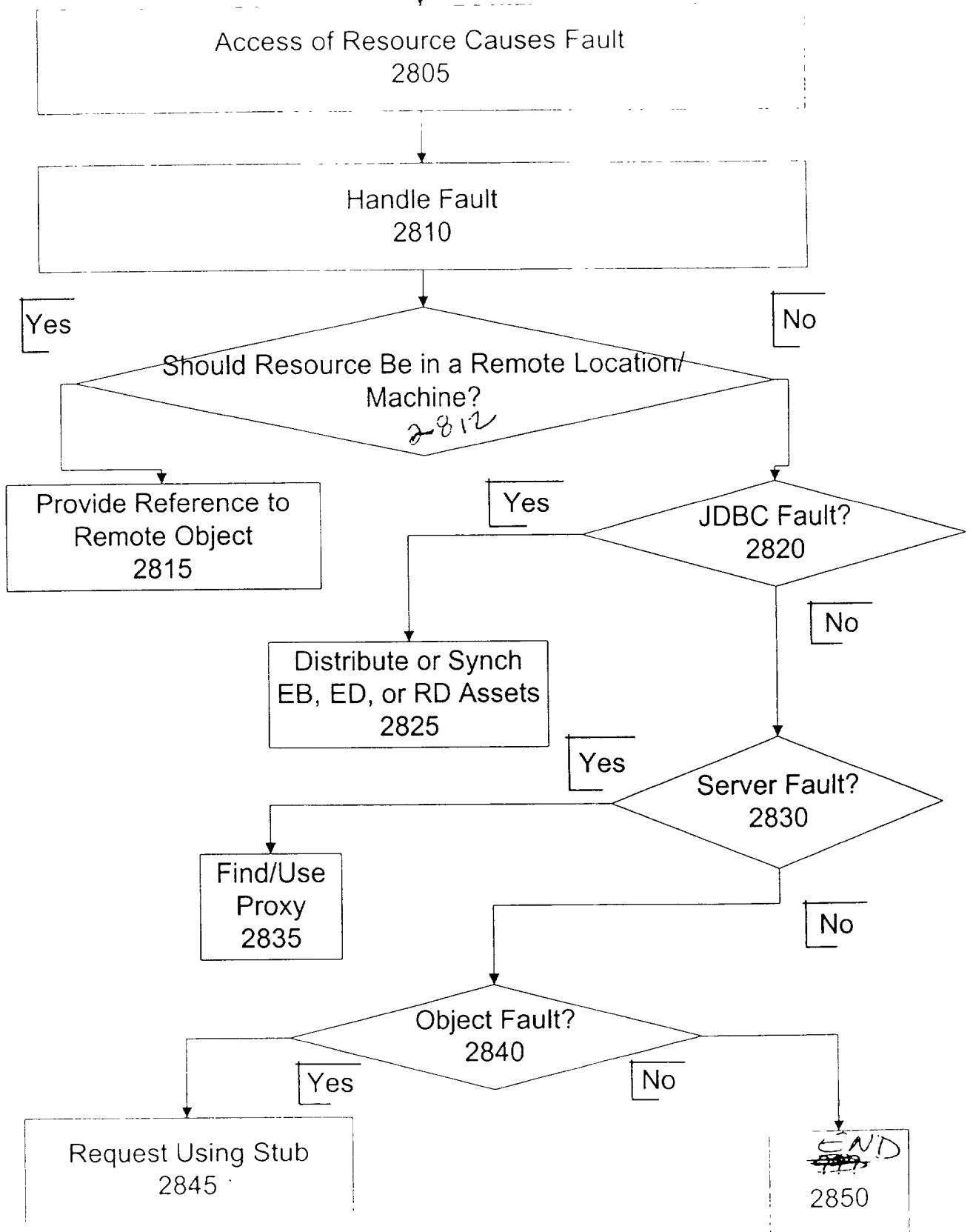
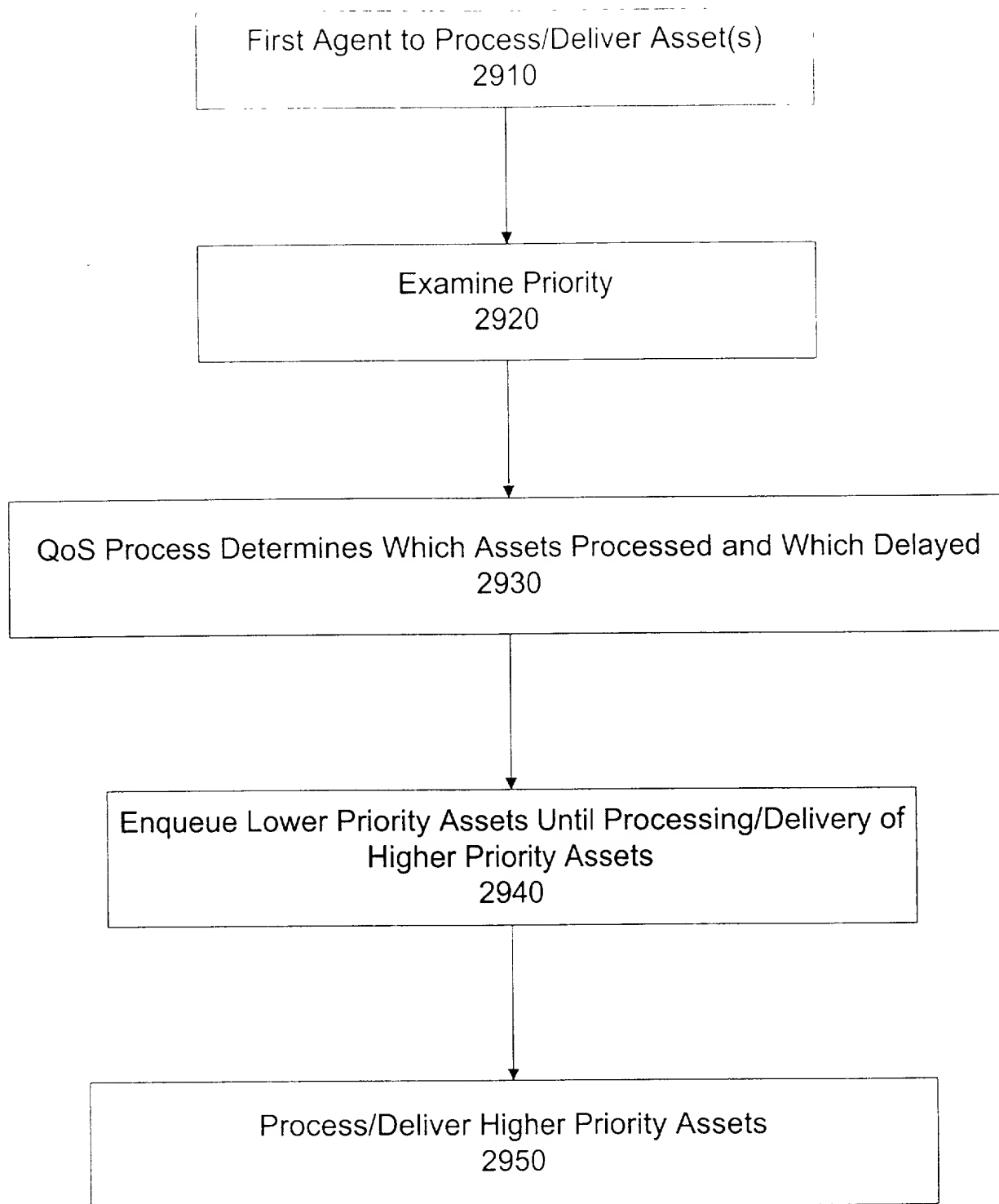


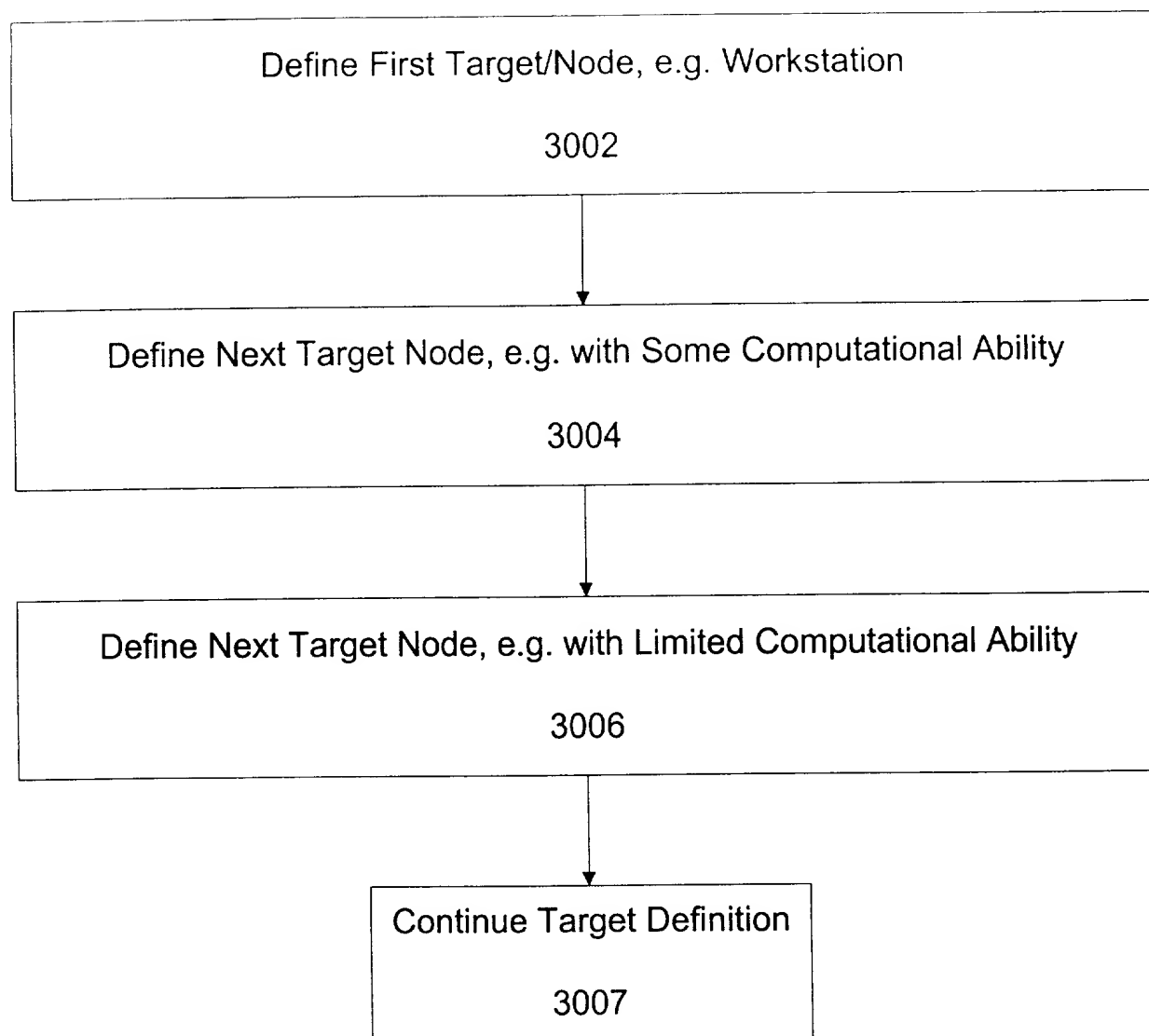
Figure 27 - Sheet 3



Bridging Process  
Figure 28

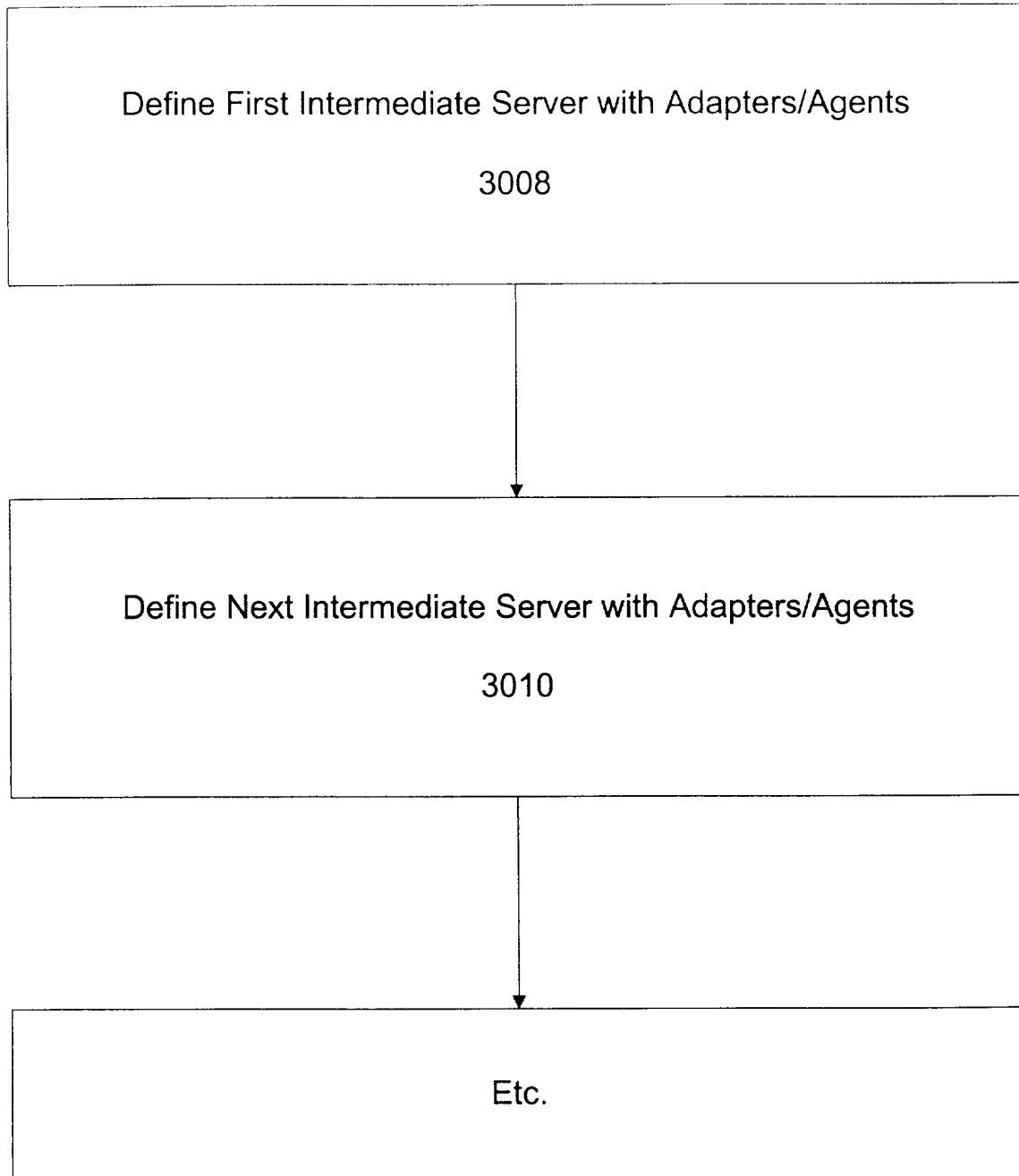


QoS  
Figure 29



Target/Client Definition

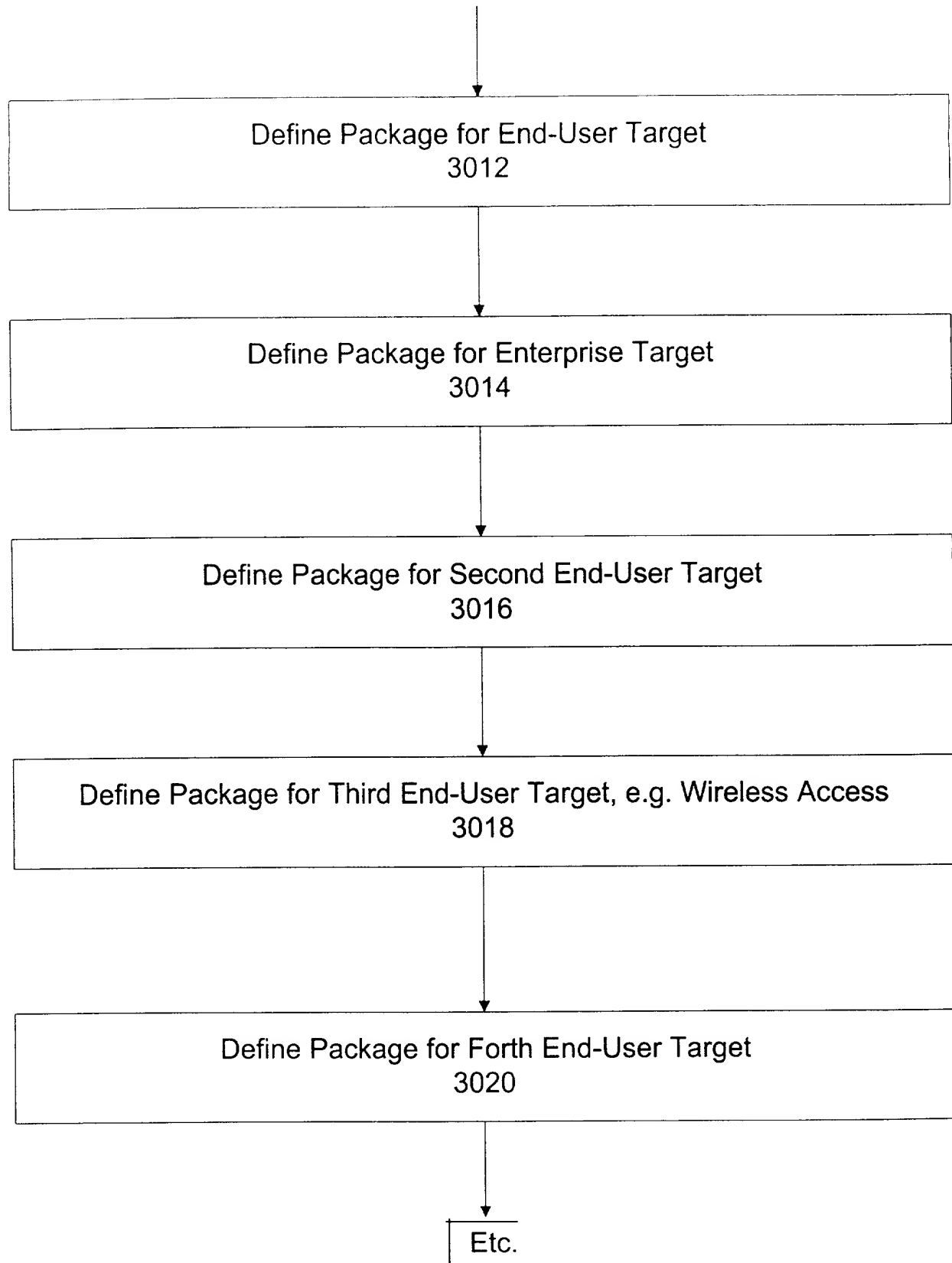
Figure 30A



Server Definition

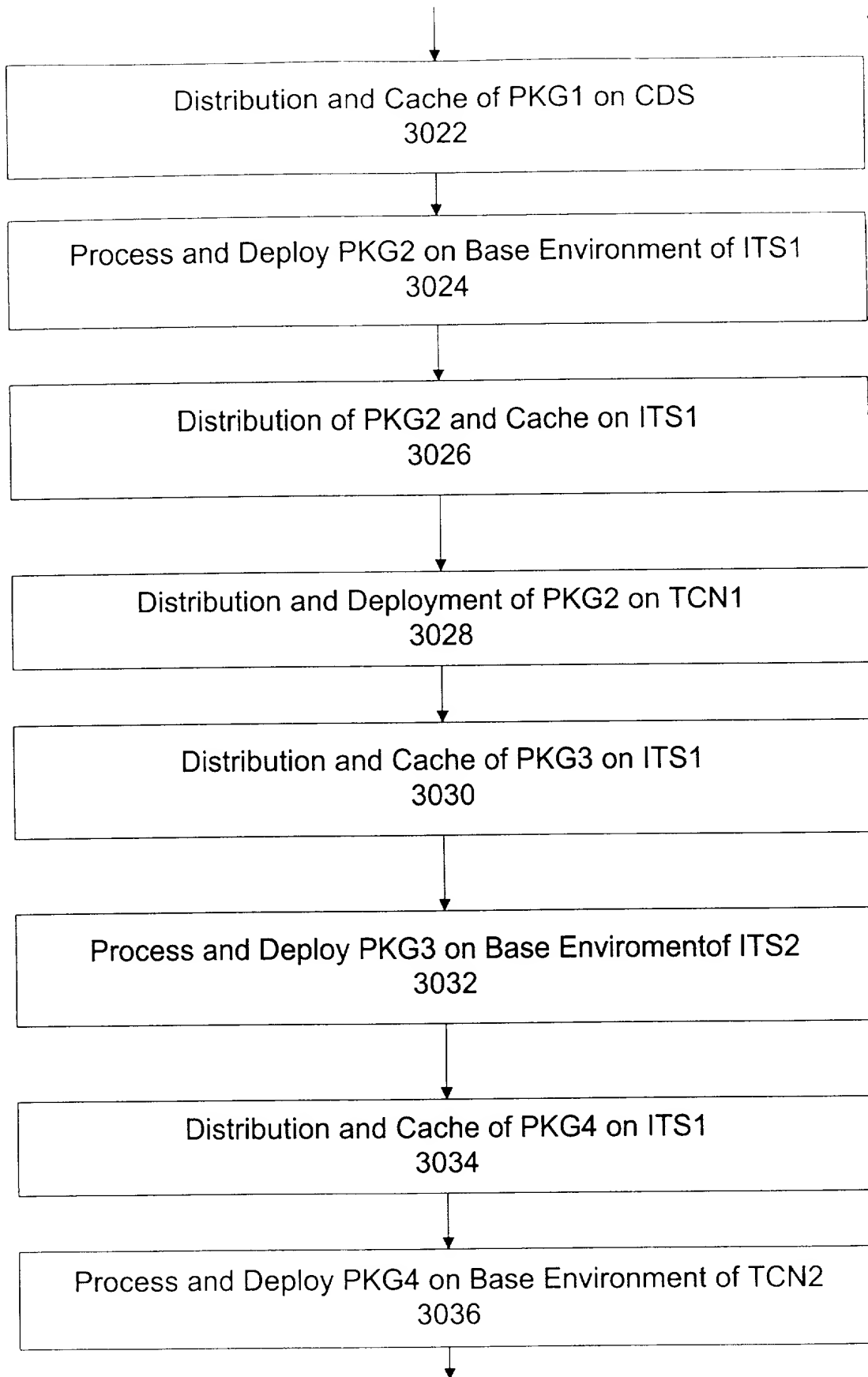
Figure 30B





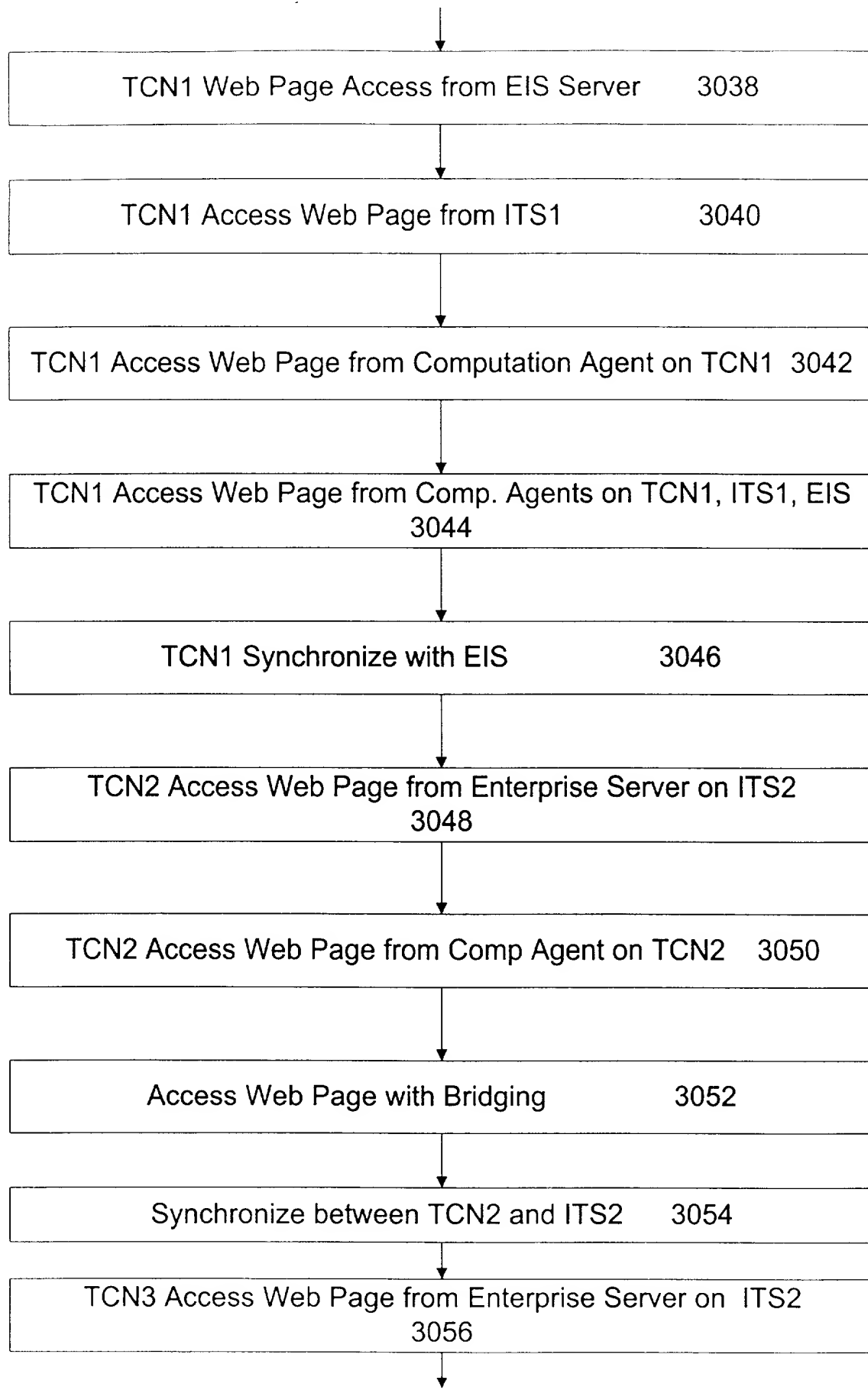
Define Packages/Applications

Figure 30C



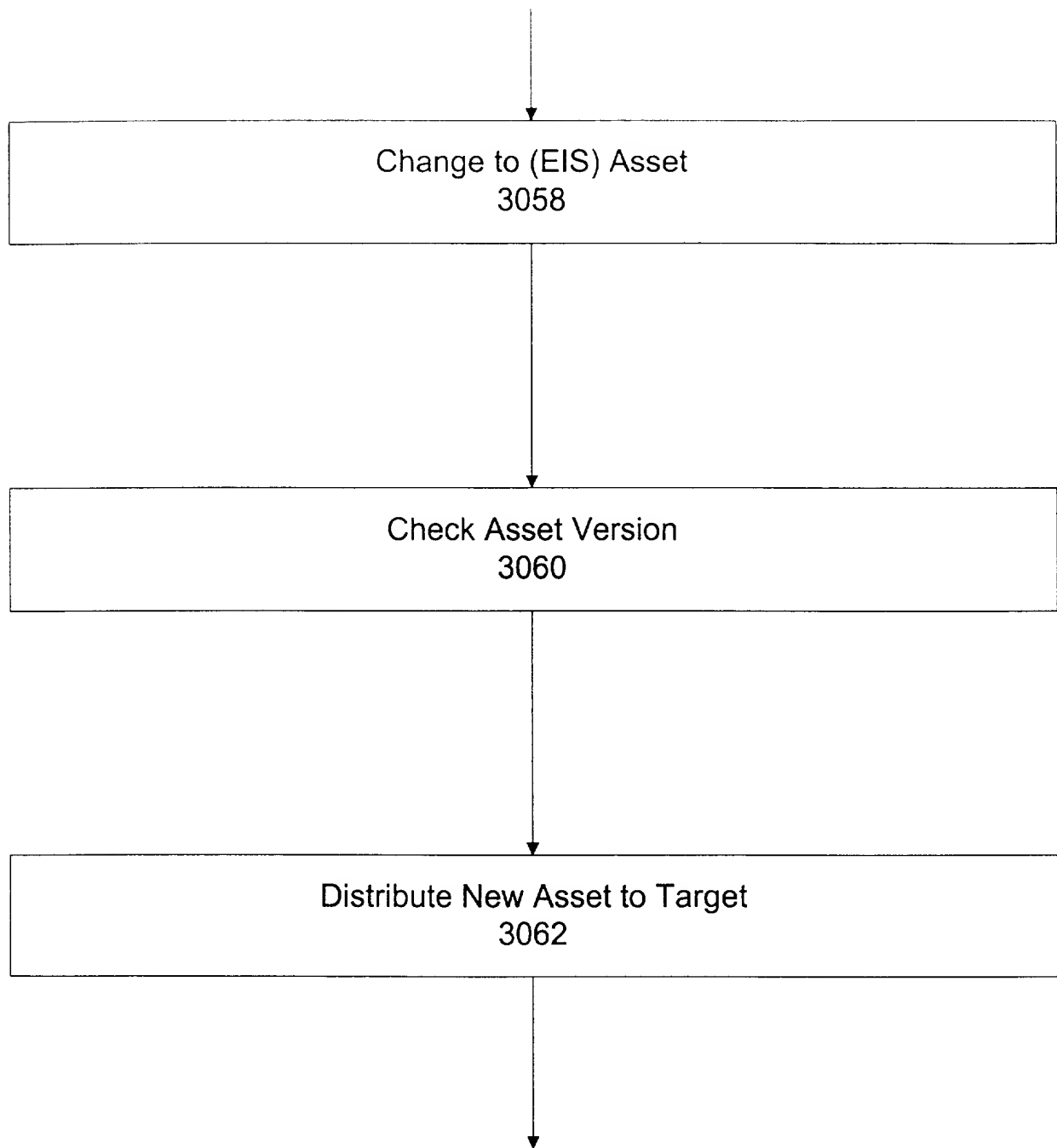
Distributing to Computational Environments

Figure 30D



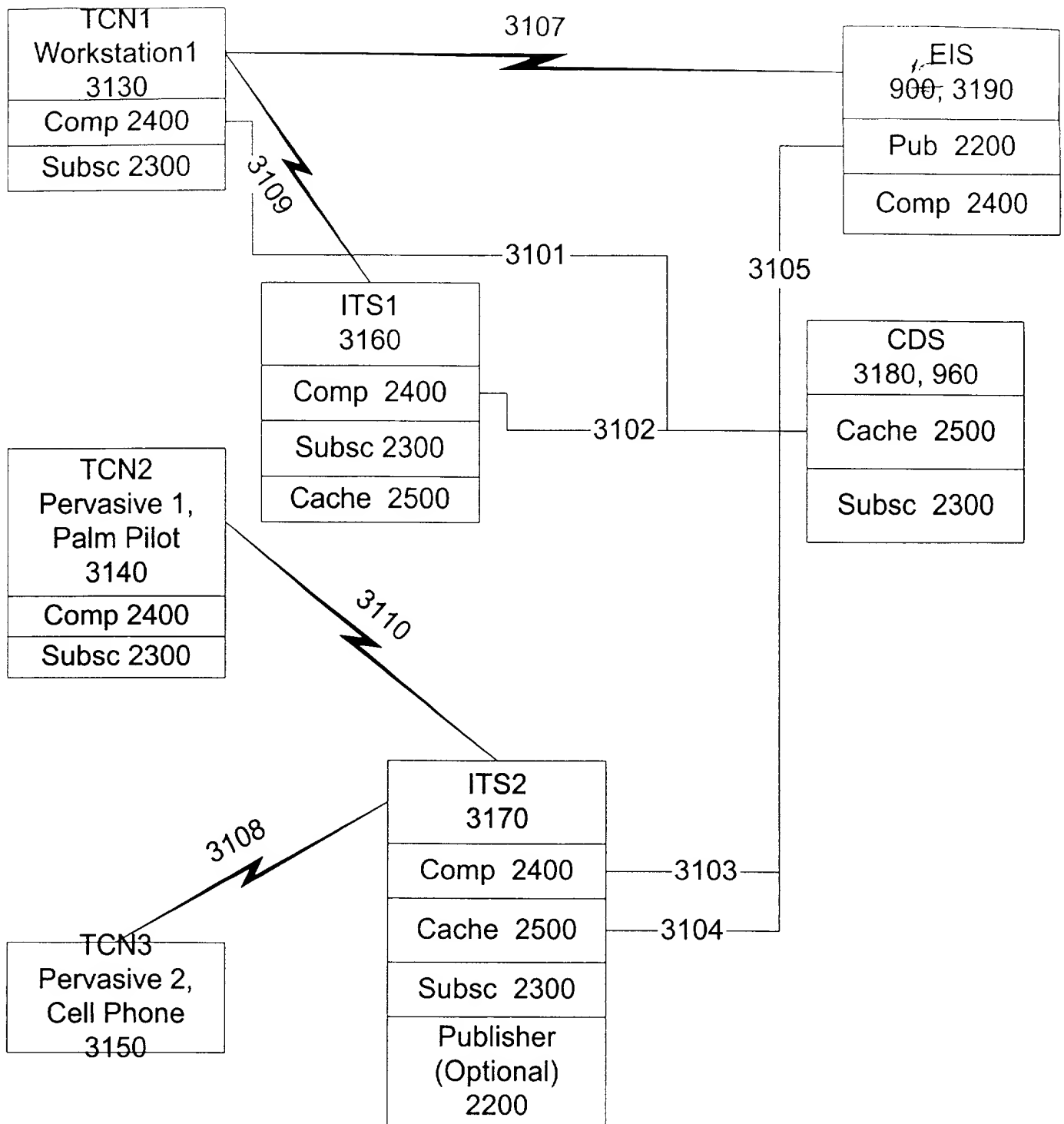
Distributed Execution of Assets

Figure 30E



Distribution of Current Assets

Figure 30F



## Example Network Connections and Asset Distribution

Figure 31